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ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA-R09-OAR-2014-0178; FRL- 9917-85-Region-9]

Approval and Promulgation of Implementation Plans; State of California; Sacramento Metro Area; Attainment Plan for 1997 8-Hour Ozone Standard

AGENCY: U.S. Environmental Protection Agency.

ACTION: Proposed rule.

SUMMARY: The Environmental Protection Agency (EPA) is proposing to approve state implementation plan (SIP) revisions submitted by the State of California to provide for attainment of the 1997 8-hour ozone national ambient air quality standard (“standard” or NAAQS) in the Sacramento Metro nonattainment area. EPA is proposing to approve the emissions inventories, air quality modeling, reasonably available control measures, provisions for transportation control strategies and measures, rate of progress and reasonable further progress (RFP) demonstrations, attainment demonstration, transportation conformity motor vehicle emissions budgets, and contingency measures for failure to make RFP or attain. EPA is also proposing to approve commitments for measures by the Sacramento Metro nonattainment area air districts.

DATES: Any comments must be submitted by [INSERT DATE 30 DAYS FROM THE DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: Submit comments, identified by docket number EPA-R09-OAR-2014-0178, by one of the following methods:

- Federal eRulemaking Portal: www.regulations.gov. Follow the on-line instructions.
- E-mail: ungvarsky.john@epa.gov.

- Mail or deliver: John Ungvarsky, Office of Air Planning (AIR-2), U.S. Environmental Protection Agency Region IX, 75 Hawthorne Street, San Francisco, CA 94105.

Instructions: All comments will be included in the public docket without change and may be made available online at www.regulations.gov, including any personal information provided, unless the comment includes Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Information that you consider CBI or otherwise protected should be clearly identified as such and should not be submitted through www.regulations.gov or e-mail. The www.regulations.gov website is an “anonymous access” system, and EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send e-mail directly to EPA, your e-mail address will be automatically captured and included as part of the public comment. If EPA cannot read your comments due to technical difficulties and cannot contact you for clarification, EPA may not be able to consider your comment.

Docket: The index to the docket for this action is available electronically on the www.regulations.gov website and in hard copy at EPA Region IX, 75 Hawthorne Street, San Francisco, California, 94105. While all documents in the docket are listed in the index, some information may be publicly available only at the hard copy location (e.g., copyrighted material), and some may not be publicly available at either location (e.g., CBI). To inspect the hard copy materials, please schedule an appointment during normal business hours with the contact listed in the **FOR FURTHER INFORMATION CONTACT** section below.

FOR FURTHER INFORMATION CONTACT: John Ungvarsky, Air Planning Office (AIR-2), U.S. Environmental Protection Agency, Region IX, (415) 972-3963, ungvarsky.john@epa.gov.

SUPPLEMENTARY INFORMATION: Throughout this document, “we,” “us” and “our” refer to EPA.

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I. The 8-Hour Ozone NAAQS and the Sacramento Metro Ozone Nonattainment Area

A. Background on the 8-Hour Ozone NAAQS

Ground-level ozone is formed when oxides of nitrogen (NO_x) and volatile organic compounds (VOC) react in the presence of sunlight.¹ These two pollutants, referred to as ozone precursors, are emitted by many types of pollution sources, including on- and off-road motor vehicles and engines, power plants and industrial facilities, and smaller area sources such as lawn and garden equipment and paints.

Scientific evidence indicates that adverse public health effects occur following exposure to ozone, particularly in children and adults with lung disease. Breathing air containing ozone can reduce lung function and inflame airways, which can increase respiratory symptoms and aggravate asthma or other lung diseases. Ozone exposure also has been associated with increased susceptibility to respiratory infections, medication use, doctor visits, and emergency department visits and hospital admissions for individuals with lung disease. Ozone exposure also increases the risk of premature death from heart or lung disease. Children are at increased risk from exposure to ozone because their lungs are still developing and they are more likely to be active outdoors, which increases their exposure. See “Fact Sheet, Proposal to Revise the National Ambient Air Quality Standards for Ozone,” January 6, 2010 and 75 FR 2938 (January 19, 2010).

In 1979, under section 109 of the Clean Air Act (CAA), EPA established primary and secondary national ambient air quality standards (NAAQS or standard) for ozone at 0.12 parts per million (ppm) averaged over a 1-hour period. 44 FR 8202 (February 8, 1979).

On July 18, 1997, EPA revised the primary and secondary NAAQS for ozone to set the

¹ California plans sometimes use the term Reactive Organic Gases (ROG) for VOC. These terms are essentially synonymous. For simplicity, we use the term VOC herein to mean either VOC or ROG.

acceptable level of ozone in the ambient air at 0.08 ppm, averaged over an 8-hour period (“1997 8-hour ozone standard”). 62 FR 38856 (July 18, 1997). EPA set the 1997 8-hour ozone standard based on scientific evidence demonstrating that ozone causes adverse health effects at lower concentrations and over longer periods of time than was understood when the pre-existing 1-hour ozone standard was set. EPA determined that the 1997 8-hour standard would be more protective of human health, especially children and adults who are active outdoors, and individuals with a pre-existing respiratory disease, such as asthma.

On March 27, 2008, EPA revised and further strengthened the primary and secondary NAAQS for ozone by setting the acceptable level of ozone in the ambient air at 0.075 ppm, averaged over an 8-hour period (“2008 8-hour ozone standard”). 73 FR 16436. On May 21, 2012, EPA designated areas of the country with respect to the 2008 8-hour ozone standard. 77 FR 30088 and 40 CFR 81.330. Today’s action only applies to the 1997 8-hour ozone standard and does not address requirements of the 2008 8-hour ozone standard.

B. The Sacramento Metro 8-Hour Ozone Nonattainment Area

Following promulgation of a new or revised NAAQS, EPA is required by the CAA to designate areas throughout the nation as attaining or not attaining the NAAQS. Effective June 15, 2004, we designated nonattainment areas for the 1997 8-hour ozone NAAQS. At the same time, we assigned classifications to many of these areas based upon their ozone “design value,” in accordance with the structure of part D, subpart 2 of Title I of the Clean Air Act. See 69 FR 23858 (April 30, 2004) and 40 CFR 51.903(a). The designations and classifications for the 1997 8-hour ozone standard for California areas are codified at 40 CFR 81.305. EPA classified the Sacramento Metro Area (SMA) as “serious” nonattainment for the 1997 8-hour ozone standard, with an attainment date no later than June 15, 2013, and published a rule governing certain facets

of implementation of the 8-hour ozone standard (Phase 1 Rule) (69 FR 23858 and 69 FR 23951, respectively, April 30, 2004). In a February 14, 2008 letter, the California Air Resources Board (CARB) requested that EPA reclassify the SMA from “serious” to “severe-15” under CAA section 181(b)(3).² On May 5, 2010, EPA finalized the reclassification of the SMA to “severe-15” with an attainment date no later than June 15, 2019.³ 75 FR 24409.

The SMA consists of Sacramento and Yolo counties and portions of El Dorado, Placer, Solano and Sutter counties. For a precise description of the geographic boundaries of the SMA, see 40 CFR 81.305. Sacramento County is under the jurisdiction of the Sacramento Metropolitan Air Quality Management District (SMAQMD). Yolo County and the eastern portion of Solano County comprise the Yolo-Solano AQMD (YSAQMD). The southern portion of Sutter County is part of the Feather River AQMD (FRAQMD). The western portion of Placer County is part of the Placer County Air Pollution Control District (PCAPCD). Lastly, the western portion of El Dorado County is part of the El Dorado County AQMD (EDCAQMD). Collectively, we refer to these five districts as the “Districts.” Under California law, each air district is responsible for adopting and implementing stationary source rules, while the CARB adopts and implements consumer products and mobile source rules. The Districts and State rules are submitted to EPA by CARB.

Ambient 8-hour ozone levels in the Sacramento area are well above the 1997 8-hour ozone NAAQS. The maximum design value for the area, based on monitored readings at the Folsom

² See SCAQMD Governing Board Resolution No. 07-9 (June 1, 2007), p. 12; CARB Resolution No. 07-41 (September 27, 2007), p. 8; and letter, James Goldstene, Executive Officer, CARB to Wayne Nastri, Regional Administrator, EPA Region 9, November 28, 2007.

³ For the 2008 ozone standard, we also designated the SMA as nonattainment and classified the area as “severe-15.” See 77 FR 30088 (May 21, 2012). The SMA attainment date for the 2008 8-hour ozone standard is as expeditious as practicable but no later than December 31, 2027. Today’s action does not address requirements concerning the 2008 8-hour ozone standard.

monitor in Sacramento County, is 0.090 ppm for the 2011-2013 period.⁴

II. CAA and Regulatory Requirements for Ozone Nonattainment SIPs

States must implement the 1997 8-hour ozone standard under Title 1, Part D of the CAA, which includes section 172, “Nonattainment plan provisions,” and subpart 2, “Additional Provisions for Ozone Nonattainment Areas” (sections 181-185).

In order to assist states in developing effective plans to address their ozone nonattainment problem, EPA issued the 8-hour ozone implementation rule. This rule was finalized in two phases. The first phase of the rule addresses classifications for the 1997 8-hour ozone standard, applicable attainment dates for the various classifications, and the timing of emissions reductions needed for attainment. See 69 FR 23951 (April 30, 2004). The second phase addresses SIP submittal dates and the requirements for reasonably available control technology and measures (RACT and RACM), reasonable further progress (RFP), modeling and attainment demonstrations, contingency measures, and new source review. See 70 FR 71612 (November 29, 2005). The rule is codified at 40 CFR part 51, subpart X.⁵ We discuss each of these CAA and regulatory requirements for 8-hour ozone nonattainment plans in more detail below.

III. California’s State Implementation Plan Submittals to Address 8-Hour Ozone Nonattainment in the Sacramento Metro Area

A. California’s SIP Submittals

⁴ See EPA Air Quality System Quick Look Report dated June 10, 2014 in the docket for today’s action. A design value is an ambient concentration calculated using a specific methodology to evaluate monitored air quality data and is used to determine whether an area’s air quality is meeting a NAAQS. The methodology for calculating design values for the 8-hour ozone NAAQS is found in 40 CFR part 50, Appendix I. This value is based on complete, validated, and certified data for the 2011-2013 timeframe.

⁵ EPA has revised or proposed to revise several elements of the 8-hour ozone implementation rule since its initial promulgation in 2004. See, e.g., 74 FR 2936 (January 16, 2009); 75 FR 51960 (August 24, 2010); and 75 FR 80420 (December 22, 2010). None of these revisions affect any provision of the rule that is applicable to EPA’s proposed action on the Sacramento 8-Hour Ozone Attainment Plan.

Designation of an area as nonattainment starts the process for a state to develop and submit to EPA a SIP providing for attainment of the NAAQS under title 1, part D of the CAA. For 8-hour ozone areas designated as nonattainment effective June 15, 2004, this attainment SIP was due by June 15, 2007. See CAA section 172(b) and 40 CFR 51.908(a) and 51.910.

California has made several SIP submittals to address the CAA's planning requirements for attaining the 1997 8-hour ozone standard in the SMA. The principal submittals are:

- Sacramento Regional Nonattainment Area 8-Hour Ozone Reasonable Further Progress Plan 2002-2008, February 2006;
- Sacramento Regional 8-Hour Ozone Attainment Plan and Reasonable Further Progress Plan, March 26, 2009;
- CARB's 2007 State Strategy ("2007 State Strategy");
- Status Report on the State Strategy for California's 2007 State Implementation Plan (SIP) and Proposed Revision to the SIP Reflecting Implementation of the 2007 State Strategy ("Revised 2007 State Strategy");⁶ and
- Sacramento Regional 8-Hour Ozone Attainment Plan and Reasonable Further Progress Plan (2013 SIP Revisions), September 26, 2013.

We refer to these submittals collectively as the "Sacramento 8-Hour Ozone Attainment Plan" or "Sacramento Ozone Plan."

1. Sacramento Regional Nonattainment Area 8-Hour Ozone Reasonable Further Progress Plan 2002-2008

⁶ On July 21, 2011, CARB further revised the State Strategy (i.e., Progress Report on Implementation of PM_{2.5} State Implementation Plans (SIP) for the South Coast and San Joaquin Valley Air Basins and Proposed SIP Revisions). Although the 2011 revision was specific to the South Coast and San Joaquin Valley ozone nonattainment areas, they contained Appendix E, an assessment of the impacts of the economic recession on emissions from the goods movement sector. The growth projections developed for emissions inventories in the Sacramento Regional 8-Hour Ozone Attainment Plan and Reasonable Further Progress Plan (2013 Revisions) also rely on the recessionary impacts in Appendix E.

The Sacramento Regional Nonattainment Area 8-Hour Ozone Reasonable Further Progress Plan 2002-2008 (“2002-2008 RFP Plan”) was adopted by the Districts’ governing boards during January-February 2006 and then by CARB Executive Order G-125-335 on February 24, 2006. See table 1 for the Districts’ adoption dates and resolution or order numbers. CARB submitted the 2002-2008 RFP Plan to EPA on February 24, 2006.⁷

Table 1. Agencies and Adoption Dates for Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan		
Agency	Hearing and Adoption Dates	Board Resolution
SMAQMD	January 26, 2006	2006-010
FRAQMD	February 6, 2006	2006-01
EDCAQMD	February 7, 2006	040-2006
YSAQMD	February 8, 2006	06-01
PCAPCD	February 19, 2006	06-01

The 2002-2008 RFP Plan includes an RFP demonstration for the 2002-2008 timeframe, an amended Rate of Progress Plan for the 1990-1996 timeframe, and motor-vehicle emissions budgets used for transportation conformity purposes.

2. Sacramento Regional 8-Hour Ozone Attainment Plan

The Sacramento Regional 8-Hour Ozone Attainment Plan and Reasonable Further Progress Plan (“2009 Ozone Attainment and RFP Plan” or “2009 Plan”) was adopted by the Districts’ governing boards during January-February 2009 and then by CARB on March 26, 2009. See table 2 for adoption dates and resolution numbers. CARB submitted the 2009 Ozone Attainment and RFP Plan to EPA on April 19, 2009.⁸

⁷ See letter from Catherine Witherspoon, Executive Officer, CARB to Wayne Nastri, Regional Administrator, EPA Region 9, February 24, 2006, with enclosures.

⁸ See letter from James N. Goldstene, Executive Officer, CARB to Laura Yoshii, Acting Regional Administrator,

Table 2. Agencies and Adoption Dates for 2009 Ozone Attainment and RFP Plan		
Agency	Hearing and Adoption Dates	Board Resolution
SMAQMD	January 22, 2009	2009-001
FRAQMD	February 2, 2009	2009-02
EDCAQMD	February 10, 2009	021-2009
YSAQMD	February 11, 2009	09-02
PCAPCD	February 19, 2009	09-01
CARB	March 26, 2009	09-19

The 2009 Ozone Attainment and RFP Plan includes an attainment demonstration, commitments by the Districts to adopt control measures to achieve emissions reductions from sources under its jurisdiction (primarily stationary sources), and motor-vehicle emissions budgets used for transportation conformity purposes. The attainment demonstration includes air quality modeling, an RFP plan, an analysis of reasonably available control measures/reasonably available control technology (RACM/RACT), base year and projected year emissions inventories, and contingency measures. The 2009 Ozone Attainment and RFP Plan also includes a demonstration that the most expeditious date for attaining the 1997 8-hour ozone NAAQS in the SMA is June 15, 2018.

In late 2013, SMAQMD and CARB updated and revised the Sacramento Regional 8-Hour Ozone Attainment Plan and Reasonable Further Progress Plan (“2013 Ozone Attainment and RFP Plan Update” or “2013 Plan Update”). The 2013 Plan Update included a revised emissions inventory that accounted for control measures adopted through 2011, revised attainment and RFP demonstrations, the effects of the economic recession, and updated transportation activity

projections provided by the Sacramento Area Council of Governments (SACOG). See table 3 for relevant hearing and adoption dates and board resolutions. CARB submitted the 2013 Plan Update to EPA on December 31, 2013.⁹

Table 3. Agencies and Adoption Dates for the 2013 Ozone Attainment and RFP Plan Update		
Agency	Hearing and Adoption Dates	Board Resolution
SMAQMD	September 26, 2013	2013-026
CARB	November 21, 2013	13-39

On June 19, 2014, CARB submitted a technical supplement to the Sacramento Vehicle Miles Travelled (VMT) emissions offset demonstration in the 2013 Plan Update.¹⁰ CARB's technical supplement includes a revised set of motor vehicle emissions estimates reflecting technical changes to the inputs used to develop the original set of calculations.¹¹ While the vehicle emissions estimates in CARB's technical supplement differ from those contained in the demonstration in the 2013 Plan Update, the conclusions of the analysis remain the same.

3. CARB State Strategy

To demonstrate attainment, the Sacramento Ozone Plan relies to a large extent on measures in CARB's 2007 State Strategy. The 2007 State Strategy was adopted by CARB on September 27, 2007 and submitted to EPA on November 16, 2007.¹²

⁹ See letter from Richard W. Corey, Executive Officer, CARB to Jared Blumenfeld, Regional Administrator, EPA Region 9, December 31, 2013, with enclosures.

¹⁰ See letter from Lynn Terry, Deputy Executive Officer, CARB, to Deborah Jordan, Director, Air Division, EPA Region 9, June 19, 2014, with enclosures. On July 25, 2014, CARB sent EPA a revised technical supplement that corrected minor typographical errors. See record of July 25, 2014 email and attachment from Jon Taylor, CARB, to Matt Lakin, EPA, included in the docket.

¹¹ The principal difference between the two sets of calculations is that CARB's technical supplement includes running exhaust, start exhaust, hot soak, and running loss emissions of VOCs in all of the emissions scenarios. These processes are directly related to VMT and vehicle trips. The revised calculation excludes diurnal and resting loss emissions of VOCs from all of the emissions scenarios because such evaporative emissions are related to vehicle population rather than to VMT or vehicle trips.

¹² See CARB Resolution No. 07-28, September 27, 2007 with attachments and letter, James N. Goldstene, Executive Officer, CARB, to Wayne Natri, Regional Administrator, EPA Region 9, November 16, 2007 with enclosures.

The 2007 State Strategy describes CARB's overall approach to addressing, in conjunction with local plans, attainment of both the 1997 Fine Particulate Matter (PM_{2.5}) and 1997 8-hour ozone NAAQS not only in the SMA but also in California's other nonattainment areas, such as the South Coast Air Basin and the San Joaquin Valley. It also includes CARB's commitments to obtain emissions reductions of NO_x and VOC from sources under the State's jurisdiction, primarily on- and off-road motor vehicles and engines, through the implementation of 15 defined State measures.¹³

On August 12, 2009, CARB submitted the Revised 2007 State Strategy, dated March 24, 2009 and adopted April 24, 2009.^{14, 15} This submittal updated the 2007 State Strategy to reflect its implementation during 2007 and 2008 and calculated emission reductions in the SMA from implementation of the State Strategy. The 2013 Plan Update incorporates the Revised 2007 State Strategy and updates NO_x and VOC emissions reductions estimates from adopted State measures and commitments. In today's proposal and in the context of the Sacramento Ozone Plan, we are only evaluating the State measures that are included in the Revised 2007 State Strategy and applicable in the SMA.

B. CAA Procedural and Administrative Requirements for SIP Submittals

CAA sections 110(a)(1) and (2) and 110(l) require a state to provide reasonable public notice and opportunity for public hearing prior to the adoption and submittal of a SIP or SIP revision. To meet this requirement, every SIP submittal should include evidence that adequate public

¹³ The 2007 State Strategy also includes measures (i.e., Smog Check improvements) to be implemented by the California Bureau of Automotive Repair. See 2007 State Strategy, pp. 64-65 and CARB Resolution 7-28, Attachment B, p. 8.

¹⁴ See CARB Resolution No. 09-34, April 24, 2009 and letter, James N. Goldstene, Executive Officer, CARB to Wayne Natri, Regional Administrator, EPA Region 9, August 12, 2009 with enclosures. Only pages 11-27 of the Revised 2007 State Strategy were submitted as a SIP revision. The balance of the report was for informational purposes only. See Attachment A to CARB Resolution No. 09-34.

¹⁵ EPA has previously approved portions of CARB's 2007 State Strategy and the Revised 2007 State Strategy that are relevant for attainment of the 1997 8-hour ozone standard in the San Joaquin Valley. See 77 FR 12674 (March 1, 2012)

notice was given and an opportunity for a public hearing was provided consistent with EPA's implementing regulations in 40 CFR 51.102.

The Districts and CARB have satisfied applicable statutory and regulatory requirements for reasonable public notice and hearing prior to adoption and submittal of the 2009 Ozone Attainment and RFP Plan and 2013 Plan Update. The Districts conducted public workshops, provided public comment periods, and held public hearings prior to the adoption of the 2002-2008 RFP Plan, 2009 Ozone Attainment and RFP Plan and 2013 Plan Update. See discussions above in III.A.1, III.A.2, and III.A.3 for hearing and adoption dates.

CARB conducted public workshops, provided public comment periods, and held a public hearing prior to the adoption of the 2007 State Strategy on September 27, 2007. See CARB Resolution No. 07-28. CARB also provided the required public notice, opportunity for public comment, and a public hearing prior to its April 24, 2009 adoption of the Revised 2007 State Strategy. See CARB Resolution 09-34. CARB also provided the required public notice, opportunity for public comment, and a public hearing prior to its November 21, 2013 adoption of the 2013 Plan Update. See CARB Resolution No. 13-39.

The SIP submittals include proof of publication for notices of the Districts' and CARB's public hearings, as evidence that all hearings were properly noticed. We find, therefore, that the submittals meet the procedural requirements of CAA sections 110(a) and 110(l).

CAA section 110(k)(1)(B) requires that EPA determine whether a SIP submittal is complete within 60 days of receipt. This section also provides that any plan that EPA has not affirmatively determined to be complete or incomplete will become complete six months after the date of submittal by operation of law. EPA's SIP completeness criteria are found in 40 CFR part 51,

Appendix V. The Sacramento Ozone Plan submittals were deemed complete by operation of law on the dates listed in table 4.

Table 4. Submittals and Completeness Determinations for Sacramento Ozone Plan		
Submittal	Submittal Date	Completeness Date
2002-2008 RFP Plan	February 24, 2006	August 24, 2006
2007 State Strategy	November 16, 2007	May 16, 2008
2009 Sacramento Regional 8-Hour Ozone Attainment Plan and RFP Plan	April 19, 2009	October 29, 2009
Revised 2007 State Strategy	August 12, 2009	February 12, 2010
2013 Sacramento Regional 8-Hour Ozone Attainment Plan and RFP Plan	December 31, 2013	May 31, 2014

IV. Review of the Sacramento Ozone Plan and the Sacramento Portion of the State Strategy

We provide our evaluation of the Sacramento Ozone Plan's compliance with applicable CAA and EPA regulatory requirements below. A more detailed evaluation can be found in the technical support document (TSD) for this proposal, which is available online at www.regulations.gov under docket number EPA-R09-OAR-2014-0178, or from the EPA contact listed at the beginning of this notice.

A. Summary of EPA's Proposed Actions

EPA is proposing to approve the 2002-2008 RFP Plan, 2009 Ozone Attainment and RFP Plan, those portions of the 2007 State Strategy and Revised 2007 State Strategy specific to ozone attainment in the SMA, and the 2013 Ozone Attainment and RFP Plan Update.

We are proposing to approve the emissions inventories in these SIP revisions as meeting the applicable requirements of the CAA and ozone implementation rule. We are also proposing to

approve the Districts' commitments to specific measures in these SIP revisions as strengthening the SIP.

We are proposing to approve the air quality modeling analysis on which the Sacramento Ozone Plan's attainment, RACM, and RFP demonstrations are based because the Sacramento Ozone Plan includes sufficient documentation and analysis for EPA to determine the modeling's adequacy.

We are proposing to approve the RACM analysis and the RFP and attainment demonstrations and related contingency measures as meeting the applicable requirements of the CAA and ozone implementation rule.

We are proposing to approve new transportation conformity motor vehicle emissions budgets for 2017 and 2018.¹⁶

We are proposing to approve the Sacramento VMT emissions offset demonstration as meeting the applicable requirements in section 182(d)(1)(A) of the Clean Air Act.

EPA's analysis and findings are summarized below and are described in more detail in the TSD for this proposal which is available online at www.regulations.gov in the docket, EPA-R09-OAR-2014-0178, or from the EPA contact listed at the beginning of this notice.

B. Emissions Inventories

1. Requirements for Emissions Inventories

CAA section 182(a)(1) requires each state with an ozone nonattainment area classified under subpart 2 to submit a "comprehensive, accurate, current inventory of actual emissions from all sources" of the relevant pollutants in accordance with guidance provided by the Administrator.

¹⁶ Motor vehicle emission budgets (MVEBs) for 2011, 2014, and 2017 were previously found adequate by EPA on July 28, 2009 (74 FR 37210). New MVEBs for 2014, 2017, and 2018 in the 2013 Plan Update were determined to be adequate on July 25, 2014. The adequacy finding was published on August 8, 2014 (79 FR 46436) with an effective date of August 25, 2014.

Emissions inventories for ozone need to contain VOC and NO_x emissions because these pollutants are precursors to ozone formation. The inventories should meet the data requirements of EPA's Consolidated Emissions Reporting Rule (codified at 40 CFR part 51 subpart A).

A baseline emissions inventory is required for the attainment demonstration and for meeting RFP requirements. The baseline year for the SIP planning emissions inventory is identified as 2002 by EPA guidance memorandum.¹⁷ Additional EPA emission inventory guidance and the federal 8-hour ozone implementation rules set specific planning requirements pertaining to future milestone years for reporting RFP and to attainment demonstration years.^{18, 19} Key RFP analysis years in the RFP demonstration include 2008 and every subsequent 3 years out to the attainment date. The federal 8-hour ozone implementation rule also requires that for purposes of defining the data elements in emissions inventories for ozone nonattainment areas, 40 CFR part 51 subpart A applies.

2. Emissions Inventories in the Sacramento Ozone Plan

The baseline planning inventories for the SMA ozone nonattainment area together with additional documentation for the inventories are found in Section 5 and Appendix A of the 2013 Plan Update and in Appendix C of CARB's Staff Report on Proposed Revisions to the 8-Hour Ozone State Implementation Plan for the Sacramento Federal Nonattainment Area, October 22, 2013 ("CARB 2013 Staff Report"). The average summer weekday emissions typical of the ozone season are used for the 2002 base year planning inventory, RFP milestone years (e.g., 2014) and the 2018 attainment year. These inventories incorporate reductions from federal, State, and

¹⁷ "2002 Base Year Emission Inventory SIP Planning: 8-Hour Ozone, PM_{2.5} and Regional Haze Programs" (EPA Memorandum from L. Wegman and P. Tsirigotis, November 18, 2002).

¹⁸ "Emission Inventory Guidance for Implementation of Ozone and Particulate Matter National Ambient Air Quality Standards (NAAQS) and Regional Haze Regulations" (EPA-454/R-05-001, August 2005, updated November 2005).

¹⁹ "Final Rule to Implement the 8-Hour Ozone National Ambient Air Quality Standard – Phase 2" (70 FR 71612, November 29, 2005).

Districts control measures adopted through January 2012 for mobile sources and through mid-2011 for stationary and area-wide sources.²⁰

Table 5 provides a summary of the average summer weekday NO_x and VOC emissions inventories for the 2002 baseline year and the 2018 attainment year. All inventories include NO_x and VOC emissions from stationary, area, off-road mobile, and on-road mobile sources.

The on-road motor vehicles inventory category consists of trucks, automobiles, buses, and motorcycles. California's model for estimating emissions from on-road motor vehicles operating in California is referred to as "EMFAC" (short for EMISSION FACTOR). EMFAC has undergone many revisions over the years, and the current on-road motor vehicles emission model is EMFAC2011, the CARB model approved by EPA for estimating on-road motor source emissions.²¹ Appendix A1 of the 2013 Plan Update contains the latest on-road motor vehicle summer planning VOC and NO_x inventories, vehicle population, Vehicle Miles Traveled (VMT) and trips for each EMFAC vehicle class category for the Sacramento Metro nonattainment area. The motor vehicle emissions in the Sacramento Ozone Plan are based on CARB's EMFAC2011 emission factor model and the latest planning assumptions from SACOG's 2013/2016 Metropolitan Transportation Improvement Program (MTIP).²²

The 2013 Plan Update contains off-road VOC and NO_x inventories developed by CARB using category-specific methods and models.²³ The off-road mobile source category includes aircraft, trains, ships, and off-road vehicles and equipment used for construction, farming, commercial, industrial, and recreational activities. Appendix A4 of the 2013 Plan Update

²⁰ See 2013 Plan Update, Appendix A5: Recent Emission Inventory Adjustments, pages A5-1 through A5-5.

²¹ See 78 FR 14533 (March 6, 2013) regarding EPA approval of the 2011 version of the California EMFAC model and announcement of its availability. The software and detailed information on the EMFAC vehicle emission model can be found on the following CARB web site: <http://www.arb.ca.gov/msei/msei.htm>.

²² Final 2013/16 Metropolitan Transportation Improvement Program, Amendment #1 to the MTP/SCS 2035, and Air Quality Conformity Analysis. August 16, 2012. Federal Highway Administration approval December 14, 2012.

²³ Detailed information on CARB's off-road motor vehicle emissions inventory methodologies is found at: http://www.arb.ca.gov/msei/categories.htm#offroad_motor_vehicles.

contains the summary of in-use off-road equipment emissions, horsepower, population and activity data for the SMA using data outputs from CARB's 2011 In-Use Off-Road Equipment model. For those off-road emissions categories not updated with new methods and data, such as lawn and garden equipment, data outputs from CARB's OFFROAD2007 model were used.

The stationary source category of the emissions inventory includes non-mobile, fixed sources of air pollution comprised of individual industrial, manufacturing, and commercial facilities. Examples of stationary sources (a.k.a., point sources) include fuel combustion (e.g., electric utilities), waste disposal (e.g., landfills), cleaning and surface coatings (e.g., printing), petroleum production and marketing, and industrial processes (e.g., chemical). Stationary source operators report to the Districts the process and emissions data used to calculate emissions from point sources. The Districts then enter the information reported by emission sources into the California Emission Inventory Development and Reporting System (CEIDARS) database.²⁴

The area sources category includes aggregated emissions data from processes that are individually small and widespread or not well-defined point sources. The area source subcategories include solvent evaporation (e.g., consumer products and architectural coatings) and miscellaneous processes (e.g., residential fuel combustion and farming operations). Emissions from these sources are calculated from product sales, population, employment data, and other parameters for a wide range of activities that generate air pollution across the Sacramento nonattainment region.²⁵

²⁴ The CEIDARS database consists of two categories of information: source information and utility information. Source information includes the basic inventory information generated and collected on all point and area sources. Utility information generally includes auxiliary data, which helps categorize and further define the source information. Used together, CEIDARS is capable of generating complex reports based on a multitude of category and source selection criteria.

²⁵ Detailed information on the area-wide source category emissions is found on the CARB website: <http://www.arb.ca.gov/ei/areasrc/areameth.htm>.

The emission inventories in the 2013 Plan Update were derived from the California Emission Projection Analysis Model (CEPAM).²⁶ The CEPAM model run used in the Sacramento Ozone Plan is based on a 2005 baseline inventory developed using the methods or databases described above (e.g., EMFAC2011, CIEDERS, CARB's 2011 In-Use Off-Road Equipment model). The inventory was calibrated to 2005 emissions and activity levels, and inventories for other years are back-cast (e.g., 2002) or forecast (e.g., 2018) using CEPAM from that base inventory.

Table 5. SMA NO_x and VOC Emissions Inventory Summaries for the 2002 Base Year and 2018 Attainment Year (average summer weekday emissions in tons per day, tpd)^a				
Category	NO_x		VOC	
	2002	2018	2002	2018
Stationary Sources	12.2	10.9	17.5	22.6
Area Sources	3.1	3.1	32.5	30.5
On-Road Mobile Sources	99.1	36.6	51.9	17.1
Off-Road Mobile Sources	50.4	25.9	40.7	24.4
Inventory Adjustments by CARB	0	0.3	4.1	4.0
Totals	164.8	76.9	146.7	98.7

^a CARB 2013 Staff Report, tables C1-4. Because of rounding conventions, totals may not add up to exact estimates in categories.

3. Proposed Action on the Emissions Inventories

We have reviewed the emissions inventories in the Sacramento Ozone Plan and the inventory methodologies used by the Districts and CARB for consistency with CAA section 182(a)(1), the ozone implementation rule, and EPA's guidance. We find that the base year and projected attainment year inventories are comprehensive, accurate, and current inventories of actual or projected emissions of NO_x and VOC in the SMA nonattainment area as of the date of their

²⁶ Appendix A2 of the 2013 Plan Update Appendices contains the estimated VOC and NO_x stationary, area-wide and off-road forecast summaries by Emission Inventory Code categories for the Sacramento nonattainment area in CEPAM. (Appendix A2 is available separately in electronic file format.) A CEPAM inventory tool was created to support the development of the 2012 PM_{2.5} SIPs due at that time. The tool was designed to support all of the modeling, planning, and reporting requirements due at that time and includes updates for all the pollutants (e.g., NO_x and VOC).

submittal. We propose, therefore, to approve these inventories as meeting the requirements of CAA section 172(c)(3), the ozone implementation rule and applicable EPA guidance.

C. Reasonably Available Control Measures and Adopted Control Strategy

1. RACM Requirements

CAA section 172(c)(1) requires that each attainment plan “provide for the implementation of all reasonably available control measures as expeditiously as practicable (including such reductions in emissions from existing sources in the area as may be obtained through the adoption, at a minimum, of reasonably available control technology), and shall provide for attainment of the national primary ambient air quality standards.”

EPA has previously provided guidance interpreting the RACM requirement in the General Preamble at 13560²⁷ and in a memorandum entitled “Guidance on Reasonably Available Control Measures (RACM) Requirements and Attainment Demonstration Submissions for the Ozone NAAQS,” John Seitz, November 30, 1999.²⁸ (Seitz memo). In summary, EPA guidance provides that to address the requirement to adopt all RACM, states should consider all potentially reasonable control measures for source categories in the nonattainment area to determine whether they are reasonably available for implementation in that area and whether they would, if implemented individually or collectively, advance the area's attainment date by one year or more. See Seitz memo and General Preamble at 13560; See also “State Implementation Plans; General Preamble for Proposed Rulemaking on Approval of Plan Revisions for Nonattainment Areas,” 44 FR 20372 (April 4, 1979) and Memorandum dated December 14, 2000, from John S. Seitz,

²⁷ The “General Preamble for the Implementation of Title I of the Clean Air Act Amendments of 1990,” published at 57 FR 13498 on April 16, 1992, describes EPA's preliminary view on how we would interpret various SIP planning provisions in title I of the CAA as amended in 1990, including those planning provisions applicable to the 1-hour ozone standard. EPA continues to rely on certain guidance in the General Preamble to implement the 8-hour ozone standard under title I.

²⁸ Available at www.epa.gov/ttn/oarpg/t1pgm.html.

Director, Office of Air Quality Planning and Standards, “Additional Submission on RACM from States with Severe One-Hour Ozone Nonattainment Area SIPs.”

Any measures that are necessary to meet these requirements that are not already either federally promulgated, part of the state's SIP, or otherwise creditable in SIPs must be submitted in enforceable form as part of a state's attainment plan for the area. 72 FR 20586, at 20614.²⁹

CAA section 172(c)(6) requires nonattainment plans to “include enforceable emission limitations, and such other control measures, means or techniques (including economic incentives such as fees, marketable permits, and auctions of emission rights), as well as schedules and timetables for compliance, as may be necessary or appropriate to provide for attainment of such standard in such area by the applicable attainment date.” See also CAA section 110(a)(2)(A). The ozone implementation rule requires that all control measures needed for attainment be implemented no later than the beginning of the attainment year ozone season. 40 CFR 51.908(d). The attainment year ozone season is defined as the ozone season immediately preceding a nonattainment area's attainment date. 40 CFR 51.900(g).

The purpose of the RACM analysis is to determine whether or not control measures exist that are technically reasonable and that provide emissions reductions that would advance the attainment date for nonattainment areas. Control measures that would advance the attainment date are considered RACM and must be included in the SIP to ensure that the attainment is

²⁹ For ozone nonattainment areas classified as moderate or above, CAA section 182(b)(2) also requires implementation of RACT for all major sources of VOC and for each VOC source category for which EPA has issued a Control Techniques Guideline (CTG). CAA section 182(f) requires that RACT under section 182(b)(2) also apply to major stationary sources of NO_x. In severe areas, a major source is a stationary source that emits or has the potential to emit at least 25 tons of VOC or NO_x per year. CAA section 182(d). Under the 8-hour ozone implementation rule, states were required to submit SIP revisions meeting the RACT requirements of CAA sections 182(b)(2) and 182(f) no later than 27 months after designation for the 8-hour ozone standard (September 15, 2006 for areas designated in April 2004) and to implement the required RACT measures no later than 30 months after that submittal deadline. See 40 CFR 51.912(a). California has submitted CAA section 182 RACT SIPs for the Districts comprising the Sacramento Metro ozone nonattainment area, and the status of the submittals is described in the TSD for this action. While any evaluation of a RACM demonstration needs to consider the potential effect of CAA section 182(b)(2) RACT on expeditious attainment, it does not require that there first be an approved RACT demonstration.

achieved “as expeditiously as practicable.” RACM is defined by EPA as any potential control measure for application to point, area, on-road and non-road emission source categories that meets the following criteria: (1) technologically feasible; (2) economically feasible; (3) does not cause “substantial widespread and long-term adverse impacts”; (4) is not “absurd, unenforceable, or impracticable”; and (5) can advance the attainment date by at least one year. General Preamble at 13560.

2. RACM Demonstration in the SIP

CARB and the Districts have rulemaking processes for development, adoption and implementation of RACM. The State and Districts have adopted numerous measures since 2002, the base year for the Sacramento Ozone Plan, and included enforceable commitments for measures that are scheduled to be adopted in the future. The RACM analysis for the Sacramento Ozone Plan includes an evaluation of the State’s, Districts’, and the Sacramento Area Council of Governments’ (SACOG) new stationary, area and mobile sources measures that have been adopted since the base year and commitments for future adoption, as discussed in more detail below. See 2009 Plan and the 2013 Plan Update, Appendix H – Reasonably Available Control Measures (for stationary and area sources) and Appendix D – Transportation Control Measures (for transportation control measures), and 2007 State Strategy, Appendix G.

For the Sacramento Ozone Plan, the Districts, CARB, and SACOG each undertook a process to identify and evaluate potential RACM that could contribute to expeditious attainment of the 8-hour ozone standards in the SMA. We describe each agency’s efforts below.

a. Districts’ RACM Analysis and Adopted Control Strategy

The Districts' RACM analysis, which focuses on stationary and area source controls, is briefly described in Chapter 7 and detailed in Appendix H of both the 2009 Plan and the 2013 Plan Update.

Since the 1970s, the Districts have adopted stationary source control rules that have resulted in significant improvement of air quality in the SMA. These regulations and strategies have yielded significant emissions reductions from sources under the Districts' jurisdiction. The Districts are also using economic incentive approaches, such as the Carl Moyer program,³⁰ to achieve additional reductions.

To identify all available RACM, the Districts conducted a thorough process that involved public meetings to solicit input, evaluation of EPA-suggested RACM and RACT, and evaluation of other air agencies' regulations. See 2009 Plan and 2013 Plan Update, Appendix H – Reasonably Available Control Measures. The Districts' staffs conducted internal reviews, consulted with CARB staff, solicited ideas from technical consultants, and attended a technology forum summit at the South Coast Air Quality Management District. In addition, the Districts' staff reviewed the following documents:

- “Final 2007 Air Quality Management Plan,” South Coast Air Quality Management District, June 2007;
 - “2007 Ozone Plan,” San Joaquin Valley Air Pollution control District, April 30, 2007;
- and

³⁰ The Carl Moyer Memorial Air Quality Standards Attainment Program (“Carl Moyer Program”) provides incentive grants for engines, equipment and other sources of pollution that are cleaner than required, providing early or extra emission reductions. Eligible projects include cleaner on-road, off-road, marine, locomotive and stationary agricultural pump engines. The program achieves near-term reductions in emissions of NO_x, PM, and VOC or reactive organic gas (ROG) which are necessary for California to meet its clean air commitments under the SIP.

- “Bay Area 2005 Ozone Strategy - Appendix C, Stationary and Mobile Source Control Measure Descriptions,” Bay Area Air Quality Management District, January 4, 2006.

District staff compared requirements in place in the SMA with adopted rules in the following air districts:

- South Coast Air Quality Management District;
- Bay Area Air Quality Management District;
- Ventura County Air Pollution Control District; and
- San Joaquin Valley Air Pollution Control District.

Each of the Districts was responsible for preparing the RACM analysis for the stationary measures in its jurisdiction. The regional mobile source and land use measures were evaluated by technical consultants for the Districts on behalf of the region.

From these analyses, staff compiled the proposed control measures, "Sacramento Regional 8-hour Ozone Attainment Plan - Control Measures: Draft, October 2006." The Districts' staffs conducted public workshops at four locations throughout the Sacramento region to solicit comments on the proposed control measures and ideas for additional control measures to be considered. Following the public workshops, staff evaluated public comments and suggestions, reviewed the final plan documents noted above, and compiled the proposed control measures included in this plan.

The following is a summary of the Districts' staff's findings:

1. The Districts' staff evaluated and analyzed all reasonable control measures that were currently available for inclusion in the Sacramento Ozone Plan.
2. The Districts' staff identified new or amended stationary control measures, and mobile source and land use control measures that are included in the Sacramento Ozone Plan.

3. The Sacramento Ozone Plan includes all RACM provided by the public and experts.
4. The available control measures that are not included collectively would not advance the attainment date or contribute to RFP for the SMA because of the insignificant or non-quantifiable amount of emissions reductions that they may potentially generate. Tables H-1 through H-6 of Appendix H of the 2009 Plan and 2013 Plan Update contain a list of the measures and a brief discussion of the conclusions.
5. The RACM demonstration for transportation control measures was prepared by SACOG and is discussed separately in Appendix D – Transportation Control Measures of the 2009 Plan and 2013 Plan Update.

In general, EPA finds that with respect to emissions of ozone precursors the Districts' current rules and regulations are equivalent to or more stringent than those developed by other air districts, with a few exceptions where more stringent controls are technically feasible but not cost effective and/or would not advance attainment.

Based on their RACM evaluations, the Districts committed to approximately twenty-two new or revised stationary source control measures for development and adoption, including measures at least as stringent as those identified in other California districts, as well as some new innovative measures. The Districts determined that the few available measures that were not included in the attainment strategy would not advance the attainment date or contribute to RFP due to the insignificant or unquantifiable emissions reductions they would potentially generate. See Appendix H in both the 2009 Plan and 2013 Plan Update for additional discussion of cost and advancement of attainment considerations used in the RACM analysis.

Since 2002, the Districts have adopted or amended approximately fifty-seven NO_x and VOC rules. In the context of the SIP, these can be broken into three groups: thirty-six have been

approved into the SIP; thirteen have been submitted and are awaiting processing (e.g., approval into the SIP); and thirteen have not yet been submitted by the State. Reductions from rules not approved into the SIP will not receive credit towards attainment. A detailed summary of the Districts' NO_x and VOC rules adopted between 2002 and 2013 is provided in the TSD. These rules include controls on various NO_x and VOC emissions from sources such as: boilers, process heaters, and steam generators; internal combustion engines; various coating operations; and solvent cleaning operations.

The 2009 Plan includes commitments by the Districts “to adopt and implement new control measures that satisfy federal Reasonably Achievable Control Measure requirements and achieve, collectively with measures adopted by [the Districts], total emission reductions of 3 tons per day VOC and 3 tons per day NO_x in the [SMA].”³¹ The 2009 Plan also includes a commitment by SMAQMD “to adopt and implement the Regional On-road Mobile Incentive Program that achieves total emission reductions of 0.1 ton per day of VOC and 0.7 ton per day of NO_x in 2011; 0.1 ton per day of VOC and 0.8 ton per day of NO_x in 2014; 0.9 ton per day of NO_x in 2017 and 2018 in the [SMA].”³² In 2013, the Districts updated the list of control measures that they committed to adopt and implement. The update reflected progress since adoption of the 2009 Plan and changes resulting from the revised attainment demonstration in the 2013 Plan Update. Tables 6 and 7 list rule commitments by the Districts in the 2013 Plan Update. The

³¹ See Resolution 2009-001, Board of Directors of the SMAQMD, January 22, 2009; Resolution 021-2009, Board of Directors of the EDCAQMD, February 10, 2009; Resolution 2009-002, Board of Directors of the FRAQMD, April 7, 2009; Resolution 09-01, Board of Directors of the PCAQMD, February 19, 2009; Resolution 09-02, Board of Directors of the YSAQMD, February 11, 2009.

³² See Resolution 2009-001, Board of Directors of the SMAQMD, January 22, 2009. The FRAQMD and PCAPCD also adopted this commitment. See Resolution 2009-002, Board of Directors of the FRAQMD, April 7, 2009, and Resolution 09-01, Board of Directors of the PCAQMD, February 19, 2009. SMAQMD administers the Sacramento Emergency Clean Air & Transportation Grant Program (SECAT), which is expected to be the primary source of emission reductions for the Regional On-road Mobile Incentive Program. The emission reductions commitment for Regional On-road Mobile Incentive Program is also part of the commitment for new control measures to achieve emissions reductions of 3 tons per day VOC and 3 tons per day NO_x in the SMA.

Districts' rule commitments in the 2013 Plan Update are expected to achieve emissions reductions of approximately 1 tpd of NO_x and 3 tpd of VOC. See 2013 Plan Update, Section 7, Table 7-5. The commitments include new or amended rules for categories such as: architectural coatings, degreasing/solvent cleaning, automotive refinishing, and large water heaters and small boilers, and a mobile source incentive program. The 2009 Plan and 2013 Plan Updates also explain that if a particular measure or a portion thereof is found infeasible or does not get its expected emission reductions, the Districts still commit to achieving the total emission reductions necessary to attain the 1997 8-hour ozone standard. The specific control measures as adopted may provide more or less reductions than estimated in the 2013 Plan Update, and if "future air quality modeling or air quality improvements indicate that all of the emission reductions from the new measures are not necessary for attainment and an infeasibility finding is made for a control measure or a portion thereof, the region's SIP commitment can be adjusted downward."³³ Tables 6 and 7 show that the Districts have already adopted and implemented several new rules that help fulfill their commitments, and of these, EPA has approved or proposed to approve submitted measures achieving approximately 1.0 tpd of NO_x and 0.3 tpd of VOC. See table 10 in today's notice.

³³ See page 7-13 of the 2013 Plan Update. Table 7-5 in the 2013 Plan Update provides additional details regarding the Districts commitments.

Table 6. Districts' Rule Adoption Commitments and Expected Reductions for NO_x in Sacramento Ozone Plan					
Title	District	Rule No.	Adoption Year	Expected Reduction (tpd)	Status
Boilers, Steam Generator, and Process Heaters	YSAQMD	2.27	2016	0.2	Not yet adopted
IC Engines	FRAQMD	3.22	2010	<0.1	77 FR 12493 (March 1, 2012)
Large Water Heaters and Small Boilers	EDCAQMD	239	2015	<0.1	Not yet adopted
	FRAQMD	3.23	2016	0.0	Not yet adopted
	PCAPCD	CM2 (247)	2015	<0.1	Proposed rulemaking and direct Final notices signed on September 5, 2014 and pending publication.
	YSAQMD	2.37	2009	0.2	75 FR 25778 (May 10, 2010)
Regional Non-regulatory and Incentive Measures ^a	SMAQMD	various	various	0.5	Not yet adopted
Total				1.1	

^a Includes Regional Mobile Incentive Programs for On-Road (e.g., SECAT) and Off-Road sources, SACOG Transportation Control Measures, Spare the Air Program, and Urban Forest Development Program.

n Commitments and Expected VOC Reductions in the Sacramento Ozone				
istrict	Rule No.	Adoption Year	Expected Reduction (tpd)	Status
AQMD	215	2013	0.1	Not yet adopted
AQMD	3.15	2014	<0.1	Not yet adopted
APCD	218	2012	0.2	76 FR 75795 (December 5, 2011)
AQMD	442	2014	0.9	Not yet adopted
AQMD	2.14	2014	0.2	Not yet adopted
AQMD	3.19	2016	<0.1	Not yet adopted
APCD	234	2015	<0.1	Not yet adopted
AQMD	459	2011	0.1	77 FR 47536 (August 9, 2012)
AQMD	2.26	2008	<0.1	Adopted but not yet submitted to EPA
AQMD	3.14	2011	<0.1	Submitted to EPA on February 10, 2014
AQMD	2.24/ 2.31	2008	0.7	Submitted to EPA on February 10, 2014
AQMD	2.29	2016	not available	Not yet adopted
APCD	245	2008	<0.1	76 FR 30025 (May 24, 2011)
AQMD	461	2014	0.1	Not yet adopted
AQMD	various	various	0.1	Not yet adopted
Totals			2.7	

ograms for On-Road (e.g., SECAT) and Off-Road sources, SACOG Transportation Control Measures, Spare the Air Program.

b. CARB's RACM Analysis and Adopted Control Strategy

Source categories for which CARB has primary responsibility for reducing emissions in California include most new and existing on- and off-road engines and vehicles, motor vehicle fuels, and consumer products. In addition, California has unique authority under CAA section 209 (subject to a waiver by EPA) to adopt and implement new emission standards for many categories of on-road vehicles and engines, and new and in-use off-road vehicles and engines.

Given the need for significant emissions reductions from mobile and area sources to meet the NAAQS in California nonattainment areas, the State of California has been a leader in the development of some of the most stringent control measures nationwide for on-road and off-road mobile sources and the fuels that power them. These standards have reduced new car emissions by 99 percent and new truck emissions by 90 percent from uncontrolled levels. 2007 State Strategy, p. 37. The State is also working with EPA on goods movement activities and is implementing programs to reduce emissions from ship auxiliary engines, locomotives, harbor craft and new cargo handling equipment. In addition, the State has standards for lawn and garden equipment, recreational vehicles and boats, and other off-road sources that require newly manufactured equipment to be 80-98 percent cleaner than their uncontrolled counterparts. *Id.* Finally, the State has adopted many measures that focus on achieving reductions from in-use mobile sources that include more stringent inspection and maintenance (I/M) or “Smog Check” requirements, truck and bus idling restrictions, and various incentive programs. Since 1994 alone, the State has taken more than 45 rulemaking actions and achieved most of the emissions reductions needed for attainment in the State’s nonattainment areas. See 2007 State Strategy, pp.

36-40. As is noted in the 2007 State Strategy, EPA has approved California's mobile source program as representing best available control measures.³⁴

CARB developed its 2007 State Strategy after an extensive public consultation process to identify potential SIP measures.³⁵ From this process, CARB identified and committed to propose 15 new defined measures. These measures focus on cleaning up the in-use fleet as well as increasing the stringency of emissions standards for a number of engine categories, fuels, and consumer products. Many, if not most, of these measures have been adopted or are being proposed for adoption for the first time anywhere in the nation. They build on CARB's already comprehensive program described above that addresses emissions from all types of mobile sources and consumer products, through both regulations and incentive programs.

During its March 2009 adoption of the 2009 Plan, CARB committed to "achieve reductions of nitrogen oxide (NO_x) emissions of 13 tons per day (tpd) and reductions or reactive organic gas (ROG) emissions of 11 tpd through the implementation of measures identified in the 2007 State Strategy." See Resolution 09-19, CARB, March 26, 2009.

In April 2009, CARB adopted the Revised 2007 State Strategy. This submittal updated the 2007 State Strategy to reflect its implementation during 2007 and 2008 and calculated emission reductions in the SMA from implementation of the State Strategy. See Revised 2007 State Strategy, pages 12 and 19. Reductions in the SMA from the statewide measures in the 2007 State Strategy had not been quantified at that time and were not reflected in the Revised 2007 State Strategy. Table 8 below lists the defined measures and expected reductions in the Revised 2007

³⁴ See 2007 State Strategy, Appendix G, and 69 FR 5412 (February 4, 2004), 69 FR 30006 (May 26, 2004) (proposed and final approval of San Joaquin Valley PM₁₀ plan). Also see 76 FR 57872 at 57879 (September 16, 2011), 77 FR 12674 at 12693 (March 1, 2012) (proposed and final approval of South Coast 2007 Air Quality Management Plan for attainment of the 1997 8-hour ozone standard).

³⁵ More information on this public process, including presentations from the workshops and symposium that preceded the adoption of the 2007 State Strategy, can be found at www.arb.ca.gov/planning/sip/2007sip/2007sip.htm.

State Strategy, including a measure from the California Bureau of Automotive Repair.³⁶ The Revised 2007 State Strategy indicates that the State expects to achieve these emission reductions by the projected attainment year of 2018. In the Revised 2007 State Strategy, CARB provided estimated emissions reductions for each measure to show that, when considered together, these measures can meet the total commitment. CARB states, however, that its enforceable commitment is to achieve specific emissions reductions for each pollutant by the given dates and not for a specific level of reductions from any specific measure. See Revised 2007 State Strategy, p. 13. A summary of the estimated and expected reductions from the proposed measures is provided in table 8 below.³⁷ As shown, the State has already adopted almost all of the measures.

Table 8. Expected Emissions Reductions from Defined Measures in the Revised 2007 State Strategy as Applicable to SMA, CARB Adoption Date, Expected Emissions Reductions (2018 planning inventory, tpd) and Current Status				
Defined State Measure	Adoption Date	2018 NO_x	2018 VOC	Current Status
Smog Check Improvements	August 31, 2009	1.4	1.3	Elements approved, 75 FR 38023 (July 1, 2010)
Expanded Vehicle Retirement	June 26, 2009	0.3	0.2	Not submitted to EPA
Modifications to Reformulated Gasoline Program	June 14, 2007	--	1.1	Approved, 75 FR 26653 (May 12, 2010)
Cleaner In-use Heavy Duty Trucks	December 16, 2010	9.5	0.8	Approved, 77 FR 20308, April 4, 2012.
Clean Up Existing Harbor Crafts	November 15, 2007	0.2	0.0	Authorization granted, 76 FR 77521, December 13, 2011.
Cleaner In-Use Off-Road Equipment (over 25 hp)	December 17, 2010	1.9	0.4	Authorization granted, 78 FR 58090, September 20, 2013.

³⁶ See Staff Report, Analysis of Sacramento Metro Area's 2009 State Implementation Plan for Ozone, CARB, March 12, 2009 ("CARB 2009 Staff Report").

³⁷ The 2013 Plan Update and CARB's 2013 Staff Report include "Accelerated Introduction of Cleaner Line-Haul Locomotives" as a State measure in the Sacramento ozone nonattainment area, but this measure was not included in the Revised 2007 State Strategy and CARB 2009 Staff Report as part of the State's original commitment.

New Emissions Standards for Recreational Boats	February 2015	0.3	3.0	Not yet adopted
Expanded Off-Road Recreational Vehicle Emissions Standards	July 25, 2013	0.0	2.7	Not yet approved by California's Office of Administrative Law
Additional Evaporative Emission Standards (for Off-Road Sources) (e.g., Portable Outboard Marine Tanks and Components)	September 25, 2008	--	0.4	Similar to federal requirement at 40 CFR 1060.105
Consumer Products Program	November 17, 2007	--	1.9	Approved, 74 FR 57074, November 4, 2009
	June 26, 2008			Approved, 76 FR 27613, May 12, 2011
	September 24, 2009			Approved, 77 FR 7535, February 13, 2012
	November 18, 2010			Proposed rulemaking and direct final notices signed on August 5, 2014 and pending publication.
Total Emissions Reduction Commitment from CARB Measures		13	11	

The TSD includes a list of all measures adopted by CARB between 1990 and 2013. These measures, reductions from which are reflected in the Sacramento Ozone Plan's baseline inventories, fall into two categories: measures that are subject to a waiver of federal preemption or authorization to adopt under CAA section 209 ("waiver or authorization measures") and those for which the State is not required to obtain a waiver or authorization ("non-waiver or non-authorization measures"). Emissions reductions from waiver or authorization measures are fully creditable in attainment and RFP demonstrations and may be used to meet other CAA requirements, such as contingency measures. See EPA's proposed approval of the San Joaquin Valley 1-hour ozone plan at 74 FR 33933, 33938 (July 14, 2009) and final approval at 75 FR 10420 (March 8, 2010). The State's baseline non-waiver or non-authorization measures have generally all been approved by EPA into the SIP and as such are fully creditable for meeting

CAA requirements. Based on CARB's adoption and implementation of measures in table 8 and emissions inventory estimates provided in CARB's 2013 Staff Report, EPA has determined that CARB has essentially met its commitments in Resolution 09-19.³⁸

c. The Local Jurisdiction's RACM Analysis

The local jurisdiction's RACM analysis was conducted by the metropolitan planning organization (MPO) for the Sacramento Metro region, the Sacramento Area Council of Governments (SACOG). This analysis, which focused on transportation control measures (TCMs), and its results are described in Appendix D of the 2009 Plan and 2013 Plan Update.

SACOG and SMAQMD jointly compiled a list of potential control measures from the following sources: Clean Air Act Section 108(f) measures; Measures considered in the San Francisco Bay Area, San Joaquin Valley and South Coast Air Quality Management District RACM analyses; a SMAQMD Workshop; and the Metropolitan Transportation Plan 2035 Draft Project List. The TCM development process and draft lists of potential TCMs were presented at public meetings on ten different dates from September 10, 2007 – March 6, 2008. These included discussions at SACOG's Regional Planning Partnership; Land Use, Housing and Air Quality Committee;³⁹ Transportation Committee; Flood Management Committee; Government Relations and Public Affairs Committee; and by the Board of Directors. This process resulted in a thorough list of control measures for consideration as potential TCMs, which could be considered as RACM.

Attachment A-2 in Appendix D of the 2013 Plan Update lists the potential control measures, organized by category, and notes whether they are considered RACM, and if not, the reasoned

³⁸ The only remaining commitment measure in CARB's Revised 2007 State Strategy as applicable in the SMA is a measure for new emissions standards for recreational boats. This measure is currently scheduled for a CARB Board hearing in February 2015

³⁹ The Land Use, Housing and Air Quality Committee subsequently became the Climate and Air Quality Committee and later became part of Land Use and Natural Resource Committee.

justification they were not found to be RACM. The measures that have been determined to be RACM were included in the Sacramento Ozone Plan as TCMs.

3. Proposed Actions on RACM and Adopted Control Strategy

The State, Districts, and SACOG have identified and otherwise provided for the implementation of a comprehensive set of measures that are among the most stringent in the nation, and we are proposing to approve the RACM demonstration in the Sacramento Ozone Plan.

Because they will strengthen the California SIP and were included in the Districts' list of RACM measures, we are proposing to approve the Districts' commitments to adopt and implement specific control measures, to the extent that these commitments have not already been fulfilled, by the specific years described in tables 6 and 7 above and in Section 7 of the 2013 Plan Update.

Based on our review of the State's RACM analysis and adopted rules, we propose to find that the Sacramento Ozone Plan provides for implementation of all RACM necessary to demonstrate expeditious attainment of the 1997 8-hour ozone standard and to meet any related RFP requirements in the SMA, consistent with the applicable requirements of CAA section 172(c)(1) and 40 CFR 51.912.

D. Attainment Demonstration

1. Requirements for Attainment Demonstrations

CAA section 172(c) and 182 requires a state to submit a plan for each of its subpart 2 nonattainment areas that demonstrates attainment of the applicable ambient air quality standard as expeditiously as practicable but no later than the specified attainment date. Under the ozone implementation rule, an attainment demonstration must meet the requirements of 40 CFR

51.112. The adequacy of an attainment demonstration shall be demonstrated by means of a photochemical grid model or any other analytical method determined by the Administrator, in the Administrator's discretion, to be at least as effective. CAA section 182(c)(2)(A). For each nonattainment area, the state must provide for implementation of all control measures needed for attainment no later than the beginning of the attainment year ozone season.

2. Air Quality Modeling

CAA section 182(c)(2)(A) requires SIPs for ozone nonattainment areas to include a “demonstration that the plan, as revised, will provide for attainment of the ozone [NAAQS] by the applicable attainment date. This attainment demonstration must be based on photochemical grid modeling or any other analytical method determined by the Administrator, in the Administrator's discretion, to be at least as effective.” Air quality modeling is used to establish emissions attainment targets, that is, the combination of emissions of ozone precursors that the area can accommodate without exceeding the relevant standard, and to assess whether the proposed control strategy will result in attainment of that standard. Air quality modeling is performed for a base year and compared to air quality monitoring data from that year in order to evaluate model performance. Once the performance is determined to be acceptable, future year changes to the emissions inventory are simulated to determine the relationship between emissions reductions and changes in ambient air quality throughout the air basin. The procedures for modeling ozone as part of an attainment demonstration are contained in EPA's “Guidance on the Use of Models and Other Analyses for Demonstrating Attainment of Air Quality Goals for the 8-Hour Ozone and PM_{2.5} NAAQS and Regional Haze”⁴⁰ (“Guidance”).

⁴⁰ “Guidance on the Use of Models and Other Analyses for Demonstrating Attainment of Air Quality Goals for the 8-Hour Ozone and PM_{2.5} NAAQS and Regional Haze”, EPA-454/B-07-002, April 2007. Additional EPA modeling guidance can be found in “Guideline on Air Quality Models” in 40 CFR part 51, Appendix W.

The air quality modeling that underpins the 2013 Plan Update is described in Chapter 6 and documented in Appendix B. We provide a brief description of the modeling and a summary of our evaluation of it below. More detailed information about the modeling and our evaluation are available in section V of the TSD.

The 2013 Plan Update uses the same model results, including the modeling protocol,⁴¹ air quality modeling selection, episode selection, model domain and spatial resolution, boundary and initial conditions, meteorological model selection and set-up, and emission inventory set-up as was used in the 2007 San Joaquin Valley (SJV) Ozone Plan approved by EPA on March 1, 2012 (77 FR 12652). The 2007 SJV Ozone Plan also includes an extensive meteorological and air quality model performance evaluation over the modeling domain.

The 2013 Plan Update, Appendix B, includes an additional air quality model performance evaluation over the Sacramento nonattainment area, including a statistical analysis demonstrating adequate overall model performance. The attainment demonstration for a given monitoring location used only those days that satisfied a number of performance criteria.

The 2013 Plan Update's Appendix B also includes documentation on the Relative Reduction Factors, which are the key results from the model for use in the attainment test. Additionally, results of modeling runs with various combinations of VOC and NO_x reductions are included to illustrate alternative control strategies and establish a "carrying capacity," a combination of VOC and NO_x emissions consistent with attainment of the ozone standard. Emission reductions using an updated baseline and future emission inventory were also compared to existing model results and found sufficient to achieve attainment. EPA proposes to conclude that the attainment tests are adequate and consistent with EPA guidance.

⁴¹ "Photochemical Modeling Protocol for Developing Strategies to Attain the Federal 8-hour Ozone Air Quality Standard in Central California," California Air Resources Board, May 22, 2007.

In addition to a modeled attainment demonstration, which focuses on locations with an air quality monitor, EPA generally requires an unmonitored area analysis. The unmonitored area analysis uses a combination of model output and ambient data to identify areas that might exceed the NAAQS if monitors were located there. It ensures that a control strategy leads to reductions in ozone in unmonitored locations that might have baseline (and future) ambient ozone levels exceeding the NAAQS. In order to examine unmonitored areas in all portions of the modeling domain, EPA recommends use of interpolated spatial fields of ambient data combined with gridded modeled outputs. Guidance, p. 29. The CARB Staff Report, Appendix F includes an unmonitored area analysis using EPA's MATS software. Based on this analysis CARB concluded that there are no unmonitored ozone peaks in the modeling domain that would violate the 1997 8-hour ozone standards.

Finally, the 2013 Ozone Plan's Chapter 10 includes a "weight-of-evidence demonstration," containing supplemental analyses in support of the attainment demonstration. These analyses include ozone air quality trends, meteorologically adjusted ozone trends, and precursor emission trends, all of which show continued progress and support the conclusion that the attainment demonstration is sound.

Based on our review, EPA proposes to find that the air quality modeling provides an adequate basis for the RACM/RACT, RFP, and attainment demonstrations in the Sacramento 2013 8-Hour Ozone SIP.

3. Attainment Demonstration

EPA's review and analysis of the State's attainment demonstration involves evaluating measures adopted and approved by EPA (through rulemaking, waiver, or authorizations) and

measures not yet submitted to EPA. Tables 9 and 10 show State and Districts measures approved by EPA and credited towards attainment.⁴²

Although the majority of the measures in the State's Revised 2007 State Strategy have been approved by EPA, a small number of measures have not, including Expanded Vehicle Retirement, Expanded Off-Road Recreational Vehicle Emissions Standards, and New Emissions Standards for Recreational Boats.⁴³ Of these, only the latter measure has not yet been adopted by CARB. In Resolution 13-39 to adopt the 2013 Plan Update, the CARB Board indicated that the State and the Districts had completed adoption of regulations that achieve emissions reductions necessary to demonstrate attainment. The State did not rely on reductions from the three aforementioned measures in its attainment demonstration.

Table 9. Creditable State Measures Applicable to SMA, Adoption Dates, and Current Status		
Defined State Measures	Adoption Date	EPA Approval
Smog Check Improvements	August 31, 2009	Elements approved, 75 FR 38023 (July 1, 2010)
Modifications to Reformulated Gasoline Program	June 14, 2007	Approved, 75 FR 26653 (May 12, 2010)
Cleaner In-use Heavy Duty Trucks	December 16, 2010 ^a	Approved 77 FR 20308, April 4, 2012.
Clean Up Existing Harbor Crafts	November 15, 2007	Authorization granted; 76 FR 77521, December 13, 2011.
Cleaner In-Use Off-Road	December 17, 2010	Authorization granted; (78 FR

⁴² The 2013 Plan Update and CARB's 2013 Staff Report describe nonregulatory programs providing emissions reductions through agreements resulting in replacement of older locomotives with cleaner engines. The Union Pacific (UP) rail yard located in Roseville has benefitted from programs targeting NO_x and Particulate Matter (PM) emissions. ARB utilized Proposition 1B Goods Movement Emission Reduction Program ("Prop 1B") funding for 15 Tier 2 "regional" line haul locomotives. UP also operates six ultra-low emitting genset switch locomotives within the Roseville rail yards. The UP 9900, an experimental Tier 3+ locomotive (Tier 4 PM, and Tier 3+ NO_x), has been assigned to UP Roseville and operates primarily in Northern California. CARB's 2013 Staff Report indicates 0.07 tpd of NO_x reduction from the State's Prop 1B. EPA is not crediting the 0.07 tpd NO_x reduction associated with Prop 1B in the Sacramento attainment demonstration because an enforceable measure supporting the reductions has not been submitted to and approved by EPA for inclusion in the SIP. EPA has adopted federal engines standards for locomotives and the resulting reductions from the federal standards are credited in the 2018 inventory. *See* 73 FR 37096 (June 30, 2008) and 40 CFR part 1033, 1065, and 1068 for more details regarding the federal locomotive standards.

⁴³ On July 25, 2013, the CARB Board adopted a measure to reduce emissions from off-highway recreational vehicles. The final rulemaking package has not been approved by State's OAL. For additional information about this measure and its status, see <http://www.arb.ca.gov/regact/2013/ohrv2013/ohrv2013.htm>.

Equipment (over 25 hp)		58090, 9/20/13).
Additional Evaporative Emission Standards (for Off-Road Sources) (e.g., Portable Outboard Marine Tanks and Components)	September 25, 2008	Similar to federal requirement at 40 CFR 1060.105.
Consumer Products Program	November 17, 2007	Approved, 74 FR 57074, November 4, 2009.
	June 26, 2008	Approved, 76 FR 27613, May 12, 2011.
	September 24, 2009	Approved, 77 FR 7535, February 13, 2012.
	November 18, 2010	Proposed rulemaking and direct final notices signed on August 5, 2014 and pending publication.

^a On April 25, 2014, the CARB Board approved Resolution 14-3 to revise CARB's Truck and Bus Rule. The final rulemaking package with the revisions to the Truck and Bus Rule has not yet been submitted to the State's Office of Administrative Law (OAL) for their approval.

The Districts have made progress in adopting measures committed to in the 2009 Plan and 2013 Plan Update. Table 10 lists the Districts' prior commitment measures in the 2013 Plan Update that have been adopted and subsequently approved by EPA. These prior commitment measures provide reductions that EPA is now crediting in the State's attainment demonstration below in table 11.

Table 10. Creditable Reductions from New Districts Measures Approved by EPA, Estimated Emissions Reductions (2018 planning inventory, tpd), and Current Status				
Rule No.	Rule Title	Reductions		EPA Approval
		NO _x	VOC	
YSAQMD 2.37	Large Water Heaters and Small Boilers	0.5	-	75 FR 25778 (May 10, 2010)
PCAPCD 218	Architectural Coatings	-	0.2	75 FR 18068 (December 5, 2011)
PCAPCD 245	Surface Coating of Metal Parts and Products	-	<0.1	76 FR 30025 (May 24, 2011)
SMAQMD 459	Automotive Refinishing	-	0.1	77 FR 47536 (August 9, 2012)

FRAQMD 3.22	Internal Combustion Engines	<0.1	-	77 FR 12493 (March 1, 2012)
PCAPCD 247	Natural Gas-Fired Water Heaters, Small Boilers, and Process Heaters	0.5	-	Proposed rulemaking and direct final notices signed on September 5, 2014 and pending publication.
Totals		1.0	0.3	

Table 11 below summarizes the attainment demonstration and associated reductions that are relied upon in the SMA to demonstrate attainment by June 15, 2019. Lines A and B are the 2002 and 2018 baseline inventories in CARB's 2013 Staff Report. Line C1 in table 11 represents adjustments made by EPA to remove credit for reductions for measures that are not yet in the SIP but for which the State had taken credit for in the baseline inventory in line B. Line C2 represents adjustments made by EPA for reductions from recent measures approved into the SIP that were not credited by the State in Line B. The attainment target in line E was derived from the Sacramento Ozone Plan's air quality modeling analysis. After accounting for all creditable measures and then comparing the remaining inventory against the attainment target, the NO_x and VOC targets have been met. Therefore, the Sacramento Ozone Plan adequately demonstrates attainment of the 1997 ozone NAAQS by June 15, 2019.

Table 11. Summary of SMA Attainment Demonstration for 8-Hour Ozone NAAQS (tons per average summer weekday)		
	NO_x	VOC
A. CARB adjusted 2002 emissions inventory with existing controls ^a	164.8	146.7
B. CARB adjusted 2018 emissions inventory with existing controls ^a	76.9	98.7
C1. EPA adjustments for measures credited by State in Line B for which EPA has determined are not creditable at this time ^b	+0.5	+1.5
C2. EPA adjustments for measures approved by EPA (see table 10) but not credited by State in adjusted 2018 inventory in Line B.	-1.0	-0.3
D. EPA adjusted 2018 inventory with controls (Line B + Line C1 + Line C2)	76.4	99.9
E. 2018 attainment target ^c	76.5	107.1
Attainment target met? (Is Line D less than Line E?)	Yes	Yes

^a CARB 2013 Staff Report, tables C3 and C4, CARB, October 22, 2013.

^b See TSD

^c CARB 2013 Staff Report, table B2.

4. Proposed Action on the Attainment Demonstration

In order to approve a SIP's attainment demonstration, EPA must make several findings and approve the plan's proposed attainment date.

First, we must find that the demonstration's technical bases, including the emissions inventories and air quality modeling, are adequate. As discussed above in sections IV.B and IV.D.2, we are proposing to approve the emissions inventories and air quality modeling on which the Sacramento Ozone Plan's attainment demonstration and other provisions are based.

Second, we must find that the SIP submittal provides for expeditious attainment through the implementation of all RACM. As discussed above in section IV.C.2, we are proposing to approve the RACM demonstration in the Sacramento Ozone Plan as meeting the requirements of CAA section 172(c)(1).

Third, EPA must find that the emissions reductions that are relied on for attainment are creditable. As discussed above in section IV.D.3, and detailed in the TSD, control measures providing creditable emission reductions sufficient to demonstrate attainment in the SMA have been approved by EPA.

For the foregoing reasons, we are proposing to approve the attainment demonstration in the Sacramento Ozone Plan.

E. Rate of Progress and Reasonable Further Progress Demonstrations

1. Requirements for Rate of Progress

Section 182(b)(1) requires, for areas classified as moderate or above, a SIP revision providing for rate of progress (ROP), defined as a reduction from the adjusted 1990 baseline emissions of at least 15% actual emissions of VOC, taking into account growth, during the first 6 years following 1990 (i.e., 3 percent per year reduction from 1990 to 1996). In addition, 40 CFR

51.905(a)(iii) provides that “If the area has an outstanding obligation for an approved 1-hour ROP SIP, it must develop and submit to EPA all outstanding 1-hour ROP plans.” Because EPA has not yet approved the entire 1-hour ROP plan for the SMA, we are addressing the remaining requirement as part of today’s action.⁴⁴

The CAA outlines and EPA guidance details the method for calculating the requirements for the 1990-1996 period. Section 182(b)(1) requires that reductions: (1) be in addition to those needed to offset any growth in emissions between the base year and the milestone year; (2) exclude emission reductions from four prescribed federal programs (i.e., the federal motor vehicle control program (FMVCP), the federal Reid vapor pressure (RVP) requirements, any RACT corrections previously specified by EPA, and any Inspection and Maintenance (I/M) program corrections necessary to meet the basic I/M level); and (3) be calculated from an “adjusted” baseline relative to the year for which the reduction is applicable.

The adjusted base year inventory excludes the emission reductions from fleet turnover between 1990 and 1996 and from Federal RVP regulations promulgated by November 15, 1990 or required under section 211(h) of the Act. The net effect of these adjustments is that states are not able to take credit for emissions reductions that would result from fleet turnover of current federal standard cars and trucks, or from already existing federal fuel regulations. However, the SIP can take full credit for the benefits of any new (i.e., post-1990) vehicle emissions standards, as well as any other new federal or state motor vehicle or fuel program that will be implemented in the nonattainment area, including Tier I exhaust standards, new evaporative emissions standards, reformulated gasoline, enhanced inspection and maintenance, California low emissions vehicle program, transportation control measures, etc.

⁴⁴ In its March 18, 1996 proposed rulemaking, EPA proposed to approve the Sacramento post-1996 ROP plan, and on January 8, 1997 EPA finalized the Sacramento post-1996 ROP. See 62 FR 1174.

2. ROP Demonstration.

On November 15, 1993, in response to the 15 percent ROP requirements in section 182(b)(1)(A) of the Act, the State submitted ROP plans for Sacramento and other moderate and above nonattainment areas in California. The 1993 submittal was superseded by revised ROP plans submitted one year later. On November 15, 1994, CARB submitted a revision to the “State of California Implementation Plan for Achieving and Maintaining the National Ambient Air Quality Standards.”⁴⁵ The SIP revision included: (a) the State’s comprehensive ozone plan; (b) the State’s previously adopted regulations; and (c) local plans addressing the ozone attainment demonstration and ROP requirements, including the “Sacramento Area Proposed Attainment and Rate-of-Progress Plans.” On December 29, 1994, the State replaced the Sacramento proposed Attainment and ROP Plan with the “Sacramento Area Attainment and Rate-of-Progress Plans.”

In its March 18, 1996 notice of proposed rulemaking on the State’s submittals (See 61 FR 10920), EPA indicated they would defer action on the portion of the Sacramento ROP plan applying to the initial 15 percent demonstration. On January 8, 1997, EPA finalized its actions on the State’s ROP submittals, and again deferred action the portion of the Sacramento ROP plan addressing the 15 percent reduction for the 1990-1996 time frame (See 62 FR 1174).

On February 24, 2006, the State submitted the 2002-2008 RFP Plan, which included Appendix F, “1990-1996 15 Percent Reduction Demonstration” for the Sacramento ozone nonattainment area (“15 percent ROP demonstration”).⁴⁶ The revised 15 percent ROP demonstration uses a 1990 average summer weekday emissions inventory as the base year

⁴⁵ See CARB Executive Order G-125-335 (February 24, 2006) and letter from Catherine Witherspoon, Executive Officer, CARB, to Wayne Natri, Regional Administrator, EPA Region 9, letter with enclosures (February 13, 2013).

⁴⁶ The February 24, 2006 submittal letter from Catherine Witherspoon, Executive Officer, CARB, to Wayne Natri, Regional Administrator, EPA Region 9, highlights the 15 percent ROP demonstration as a significant part of the 2002-2008 RFP Plan submittal. See Executive Order G-125.335. In addition, the resolutions adopted by the Districts boards include language approving the 15% ROP demonstration. E.g., See SMAQMD Resolution No. 2006-010.

inventory and addresses 1990-1996. A summary of the 15 percent ROP demonstration is provided below in table 12. As the table shows, the Sacramento nonattainment area exceeds the required 15 percent reduction for 1990-1996 timeframe. Significant measures put in place prior to or during the 1990-1996 period and relied upon in 15 percent ROP Plan included:

Reformulated Gasoline - Phases I and II, Low Emission Vehicles and Clean Fuels, Consumer Products - Phases I and II, and Antiperspirants/Deodorants. In addition, the Districts adopted and implemented numerous solvent and coatings rules to reduce VOC emissions. The TSD for today's action includes compilations of CARB's and the Districts' measures adopted since 1990.

Table 12. 15% Rate-of-Progress Analysis (1-hour ozone)	
VOC Emission Calculations	tons/day^a
1. 1990 baseline VOC inventory	236
2. Non-creditable FMVCP/RVP adjustments	7
3. Adjusted 1990 baseline VOC inventory (Line 1 – Line 2)	229
4. 1996 VOC inventory forecast with existing controls + ERCs	189
5.a. 1996 Reductions from adjusted 1990 baseline (Line 3 - Line 4)	40
5.b. Non-creditable RACT & I/M adjustments	3
6. 1996 Forecasted VOC creditable reductions since 1990 (Line 5.a - Line 5.b)	37
7. 1996 Forecasted % VOC creditable reductions since 1990 (Line 6 ÷ Line 3)	16%
8. RFP % Reduction required from 1990 adjusted baseline VOC inventory	15%
9. Forecasted % VOC surplus (Line 8 – Line 7)	1%

^a Sacramento Regional Nonattainment Area 8-Hour Ozone Reasonable Further Progress Plan 2002-2008, February 2006, Appendix F: 1990-1996 15 Percent Reduction Demonstration.

3. Requirements for Reasonable Further Progress

CAA sections 172(c)(2) and 182(b)(1) require plans for nonattainment areas to provide for reasonable further progress (RFP). RFP is defined in section 171(1) as “such annual incremental reductions in emissions of the relevant air pollutant as are required by this part or may reasonably be required by the Administrator for the purpose of ensuring attainment of the applicable [NAAQS] by the applicable date.”

The ozone implementation rule requires submittal of an RFP plan at the same time as the attainment demonstration. CAA section 182(c)(2)(B) requires that ozone nonattainment areas classified as serious or higher to submit no later than 3 years after designation for the 8-hour ozone NAAQS an RFP SIP providing for an average of 3 percent per year of VOC and/or NO_x emissions reductions for (1) the 6-year period immediately following the baseline year; and (2) all remaining 3-year periods after the first 6-year period out to the area's attainment date.

The RFP plan must describe the control measures that provide for meeting the reasonable further progress milestones for the area, the timing of implementation of those measures, and the expected reductions in emissions of attainment plan precursors. See 40 CFR 51.910(a).

a. NO_x substitution

The implementation rule interprets the RFP requirements for the 1997 ozone standard, and requires that 8-hour nonattainment areas classified under subpart 2 as moderate and above achieve a 15 percent VOC emission reduction, accounting for growth, in the first 6 years after the baseline. 40 CFR 51.910(a)(1). CAA Section 182(c)(2)(C) allows for the substitution of NO_x emission reductions in place of VOC reductions to meet the RFP requirements. Because Sacramento is classified as Severe-15, if the State intends to use NO_x substitution to meet its RFP milestones, it must demonstrate, and EPA must approve, a demonstration showing a 15 percent VOC reduction in the first six years after the baseline for the Sacramento Area. See 40 CFR 51.910(a)(1)(ii). Upon EPA approval of the 15 percent VOC reduction, any VOC reduction shortfalls in the RFP demonstration can be met by using NO_x emission reductions. According to EPA's NO_x Substitution Guidance,⁴⁷ the substitution of NO_x reductions for VOC reductions must be done on a percentage basis, rather than a straight ton-for-ton exchange. There are two steps for substituting NO_x for VOC. First, an equivalency demonstration must show that the

⁴⁷ Environmental Protection Agency (OAQPS), "NO_x Substitution Guidance", December 1993.

cumulative RFP emission reductions are consistent with the NO_x and VOC emission reductions determined in the ozone attainment modeling demonstration. Second, specified reductions in NO_x and VOC emissions should be accomplished in the interim period between the 2002 base year and the attainment date, consistent with the continuous RFP emission reduction requirement.

4. RFP Demonstrations

The RFP demonstrations for the 1997 ozone standard are found in three documents: the 2002-2008 RFP Plan, 2009 Plan, and the 2013 Plan Update. The demonstrations address VOC and NO_x for 2011, 2014, 2017 milestone years and the 2018 attainment year, and use the 2002 average summer weekday emissions inventory as the base year inventory. The most significant State measures providing reductions during the 2002-2018 time frame and relied upon for the RFP demonstration include Low Emission Vehicles II and III standards, Zero Emissions Vehicle standards, California Reformulated Gasoline Phase 3, and Cleaner In-Use Heavy-Duty Trucks. The TSD for today's action includes a compilation of CARB measures adopted between 1990–2013. State measures adopted since 2007 and the estimated reductions, are described in the IV.C and IV.D of this notice. Additional information regarding implementation and expected reductions from CARB's adopted measures is also available on CARB's rulemaking activity web site.⁴⁸

The RFP demonstration is expressed in terms of cumulative emissions reductions and percent of emissions reductions per year. For example, see table 13-1 in the 2013 Ozone Plan. The demonstration in the 2013 Plan Update supersedes the previously submitted demonstration for 2014, 2017, and 2018 in the 2009 Plan. For 2008 and 2011, EPA adjusted and revised the

⁴⁸ See <http://www.arb.ca.gov/regact/regact.htm>.

demonstrations in the 2002-2008 RFP Plan and 2009 Plan. This was necessary because the State's 2013 Plan Update did not include RFP demonstrations for the milestones years that had already passed (i.e., 2008 and 2011). The corrections are detailed in the TSD supporting today's action.

The RFP demonstrations indicate the combination of VOC and NO_x reductions for each of the milestone years are in excess of the RFP targets. The excess serves as a contingency measure reserve and provides the 3 percent of emission reductions necessary to meet the contingency measure requirement for each milestone year. See table 13-1 of 2013 Plan Update. We discuss this contingency reserve below in the section on contingency measures. For the purposes of our evaluation of the RFP demonstration as presented in table 13 below, we have included the contingency reserve on Line 24. This allows us to evaluate if the 2013 Ozone Plan would demonstrate the required RFP with the contingency reserve. We note that the RFP demonstration presented in table 13 is based on the State's estimate of the emissions levels needed for attainment in the 2013 Plan Update.

Table 13. Calculation of RFP Demonstrations for SMA						
VOC Emission Calculations (tons/day)	2002	2008^a	2011^b	2014^c	2017^c	2018^c
1. 2002 Baseline VOC inventory ^c	147	147	147	147	147	147
2. Non-creditable FMVCP/RVP adjustments ^d	0	13 ^e	11 ^e	11	12	12
3. Adjusted 2002 baseline VOC inventory (Line 1 – Line 2)		134	136	136	135	135
4. VOC emissions forecast with existing controls + ERCs		120 ^e	120 ^e	106	100	99
5. Adjustments to remove reductions from measures not yet approved by EPA ^f		-	2	2	2	2
6. RFP commitment for VOC reductions from new measures		-	0	0	0	0
7. Forecasted VOC creditable reductions since 2002 (ine 3 - Line 4 - Line 5 + Line 6)		15	15	28	33	34
8. Forecasted % VOC reductions since 2002 (Line 7 ÷ Line 3)		11%	11%	21%	25%	26%

9. RFP % reduction required from 2002 adjusted baseline VOC inventory ^g		18%	27%	36%	45%	48%
10. Forecasted % VOC shortfall (Line 9 – Line 8)		7%	16%	15%	20%	22%
11. VOC shortfall previously addressed provided by NO _x substitution %		-	7%	16%	16%	20%
12. Actual VOC shortfall		7%	9%	0%	4%	2%
NO_x Emission Calculations (tons/day)	2002	2008^a	2011^b	2014^c	2017^c	2018^c
13. 2002 Baseline NO _x inventory ^a	165	165	165	165	165	165
14. Non-creditable FMVCP adjustments ^d	0	7 ^e	11 ^e	10	11	11
15. Adjusted 2002 baseline NO _x inventory (Line 13 – Line 14)		158	154	155	154	154
16. NO _x emissions forecast with existing controls + ERCs		126 ^e	126 ^e	93	80	77
17. Adjustments to remove reductions from measures not yet approved by EPA ^f			0	3	1	1
18. RFP commitment for NO _x reductions from new measures			0	0	0	0
19. Forecasted NO _x creditable reductions since 2002 (Line 15 - Line 16 - Line 17 + Line 18)		32	29	59	74	76
20. Forecasted % NO _x reductions since 2002 (Line 19 ÷ Line 16)		21%	19%	38%	48%	50%
21. NO _x previously used for VOC shortfall by NO _x substitution %		0%	7%	16%	16%	20%
22. NO _x available for VOC shortfall by NO _x substitution and contingency %		21%	12%	22%	32%	30%
23. NO _x substitution needed for VOC shortfall % (Same as Line 12)		7%	9%	0%	4%	2%
24. Forecasted % NO _x reduction surplus (Line 22 – Line 23)		14%	3%	22%	28%	27%
25. Contingency measure reserve achieved?		Yes	Yes	Yes	Yes	Yes
26. RFP achieved?		Yes	Yes	Yes	Yes	Yes

^a Sacramento Regional Nonattainment Area 8-Hour Ozone Reasonable Further Progress Plan 2002-2008, February 2006, Chapter 6, table 6-1.

^b Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan, December 19, 2008, Chapter 5, tables 5-2 and 5-3, adjusted by EPA.

^c Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan, September 26, 2013, Chapter 13, table 13-1.

^d CARB provided the non-creditable FMVCP/RVP adjustments in documents listed immediately above.

^e Adjusted by EPA for consistency with baseline in 2013 Ozone Plan. See TSD.

^f See TSD. Does not include EPA adjustments for measures approved by EPA (see table 10) but not yet credited by State in RFP demonstration.

^g RFP reduction requirements contained in EPA's Final Rule to Implement the 8-Hour Ozone NAAQS (Phase 2) published in the November 29, 2005 Federal Register. See 70 FR 70612.

Note: Because of rounding convention, values in table may not reflect sum of underlying numbers.

5. Proposed Action on the ROP and RFP Demonstrations

EPA has reviewed the ROP and RFP demonstrations in the 2002-2008 RFP Plan, 2009 Plan, and the 2013 Plan Update and has determined that they were prepared consistent with applicable EPA regulations and policies. As seen in table 12, the Sacramento nonattainment area achieves the 15 percent VOC ROP for the 1990-1996 timeframe. Because the Sacramento area has achieved a 15 percent VOC emission reduction, accounting for growth, in the first 6 years after the 1990 baseline, the area is eligible to use NO_x substitution in its RFP demonstration for the 1997 ozone standard. As seen in table 13, emissions reductions for VOC and NO_x, after setting aside a 3 percent contingency measures reserve, are below the RFP percent reduction targets for 2008, 2011, 2014, 2017, and 2018 and demonstrate that the SMA has met its RFP targets.

Based on our evaluation above, we propose to find that: Appendix F of the 2002-2008 RFP Plan provides for VOC reductions of at least 15 percent from 1990 baseline emissions as required by CAA section 182(b)(1); the 2002-2008 RFP Plan provides for at least an 18 percent reduction (VOC with NO_x substitution) from 2002 baseline emissions as required by CAA section 182(b)(1) and 40 CFR 51.910; and (3) the 2009 Plan and 2013 Plan Update provide for at least a 3 percent annual reduction (VOC with NO_x substitution) averaged over a consecutive 3-year period for the SMA to meet its RFP milestones for 2011, 2014, 2017, and 2018 as required by CAA section 182(c)(2)(B) and 40 CFR 51.910.

F. Contingency Measures

1. Requirements for Contingency Measures

Under the CAA, ozone nonattainment areas classified under subpart 2 as moderate or above must include in their SIPs contingency measures consistent with sections 172(c)(9) and 182(c)(9). Contingency measures are additional measures to be implemented in the event the

area fails to meet an RFP milestone or fails to attain by the applicable attainment date. These contingency measures must be fully adopted rules or control measures that are ready to be implemented upon failure to meet the milestones or attainment. The SIP should contain trigger mechanisms for the contingency measures, specify a schedule for implementation, and indicate that the measure will be implemented without significant further action by the state or by EPA. See 68 FR 32802 at 32837 and 70 FR 71612 at 71650.

Additional guidance on the CAA contingency measure provisions is found in the General Preamble, 57 FR 13498, 13510–13512 and 13520. The guidance indicates that states should adopt and submit contingency measures sufficient to provide a 3 percent emissions reduction from the adjusted RFP baseline. EPA concludes this level of reductions is generally acceptable to offset emission increases while states are correcting their SIPs. These reductions should be beyond what is needed to meet the attainment and/or RFP requirement. States may use reductions of either VOC or NO_x or a combination of both to meet the contingency measure requirements. 57 FR at 13520, footnote 6.

EPA guidance provides that contingency measures may be implemented early, *i.e.*, prior to the milestone or attainment date.⁴⁹ Consistent with this policy, states are allowed to use excess reductions from already adopted measures to meet the CAA sections 172(c)(9) and 182(c)(9) contingency measures requirement. This is because the purpose of contingency measures is to provide extra reductions that are not relied on for RFP or attainment, and that will provide a cushion while the plan is being revised to fully address the failure to meet the required milestone. Nothing in the CAA precludes a state from implementing such measures before they are triggered. This approach has been approved by EPA in numerous SIPs. See 62 FR 15844 (April

⁴⁹ Memorandum, G.T. Helms, Chief, Ozone/Carbon Monoxide Programs Branch to Air Directors, “Contingency Measures for Ozone and Carbon Monoxide (CO) Redesignations,” June 1, 1992.

3, 1997) (approval of the Indiana portion of the Chicago area 15 percent ROP plan); 62 FR 66279 (December 18, 1997) (approval of the Illinois portion of the Chicago area 15 percent ROP plan); 66 FR 30811 (June 8, 2001) (proposed approval of the Rhode Island post-1996 ROP plan); 66 FR 586 and 66 FR 634 (January 3, 2001) (approval of the Massachusetts and Connecticut 1-hour ozone attainment demonstrations). In the only adjudicated challenge to this approach, the court upheld it. See *LEAN v. EPA*, 382 F.3d 575 (5th Cir. 2004). 70 FR 71612 at 71651.

2. Contingency Measures in the Sacramento Ozone Plan

The Sacramento Ozone Plan relies on emission reductions in excess of RFP as contingency measures if the SMA fails to meet RFP requirements. If the SMA fails to attain by June 15, 2019, the Sacramento Ozone Plan relies on additional incremental emissions reductions in 2019 from fleet turnover resulting from continued implementation of measures in the Revised 2007 State Strategy.

Contingency measures for failure to make RFP. To provide for contingency measures for failure to make RFP, the SIP relies on surplus NO_x reductions in the RFP demonstration. Table 13 demonstrates that milestone years (i.e., 2008, 2011, 2014, 2017) and the attainment year (i.e., 2018) have NO_x reductions exceeding what is required for RFP and the 3 percent contingency.

Contingency measures for failure to attain. To provide contingency measures for failure to attain, the SIP relies on the additional incremental emissions reductions resulting from fleet turnover in calendar year 2019 (the year after the attainment year). Additional emissions reductions resulting from turnover in the on- and off-road mobile source fleet in 2019 may be used to meet the attainment contingency measure requirement. Table 14 below demonstrates that the Sacramento Ozone Plan has sufficient VOC reductions in 2019 to provide at least a three percent reserve for use as a possible attainment contingency measure. In addition, the

Sacramento Ozone Plan also provides NO_x reductions in 2019 that are available for use in support of the attainment contingency measure, although the NO_x reductions alone do not provide a three percent reserve unless combined with a portion of the VOC reductions.

Table 14. Calculation of Post-2018 Attainment Contingency Measure		
Emission Calculations	VOC tpd	NO_x tpd
A. 2018 Attainment Year Inventory Target	107.1	76.5
B. CARB 2019 Emissions Forecast	99.8	74.4
C. EPA Adjustments to 2019 Inventory	+1.5	+0.5
D. Adjusted 2019 Inventory (Line B + Line C)	101.3	74.9
E. Forecasted 2019 Creditable Reductions (Since 2018) Exceeding the Attainment Target Since 2018 (Line A – Line D)	5.8	1.6
F. Forecasted Percent Reductions Since 2018 (Line E ÷ Line D)	5.7%	2.1%
G. Percent Reduction Required From 2018 Adjusted Baseline Inventory	3%	na ^a
H. Attainment Contingency Measure Met? (Is Line F > or = Line G?)	Yes	na ^a

^a not applicable (na) because requirement already met by VOC reductions.

These reductions are from fully creditable measures. They are not relied on to demonstrate either attainment or RFP. For these reasons, these post-2018 emissions reductions may be used to fulfill the attainment contingency measure requirement.

As discussed above, EPA is proposing to approve both the RFP and attainment demonstrations in the Sacramento Ozone Plan because we have determined the Sacramento Ozone Plan provides sufficient VOC emissions reductions to meet these requirements.

3. Proposed Action on the Contingency Measures

Contingency measures for failure to make RFP. As discussed above in section IV.D, we are proposing to approve the SMA's RFP demonstration. As shown in the RFP demonstration in table 13, there are excess NO_x reductions of 3 percent or greater in each milestone year. These

excess reductions are beyond those needed to meet the next RFP percent reduction requirement and address the RFP contingency measure requirement for 2008, 2011, 2014, 2017, and 2018.

Contingency measures for failure to attain. The incremental additional emissions reductions that will occur in 2019 (the year after the attainment year) from the continuing implementation of both on- and off-road motor vehicle controls may be used to meet the contingency measure requirement for failure to attain. As shown in table 14, there is excess VOC reductions of 3 percent or greater in 2019. These excess reductions fulfill the attainment contingency measure requirement for 2019.

The Sacramento Ozone Plan includes measures and reductions that collectively meet the CAA's minimum requirements (e.g., no additional rulemaking, surplus to attainment and RFP needs) and allow us to determine the reductions are at least equivalent to the current estimate of one year's worth of RFP. Therefore, we are proposing to approve the RFP and attainment contingency measure provisions in the Sacramento Ozone Plan.

G. Motor Vehicle Emissions Budgets for Transportation Conformity

1. Requirements for Motor Vehicle Emissions Budgets

CAA section 176(c) requires federal actions in nonattainment and maintenance areas to conform to the goals of SIPs. This means that such actions will not: (1) cause or contribute to violations of a NAAQS, (2) worsen the severity of an existing violation, or (3) delay timely attainment of any NAAQS or any interim milestone.

Actions that involve Federal Highway Administration (FHWA) or Federal Transit Administration (FTA) funding or approval are subject to EPA's transportation conformity rule, which is codified in 40 CFR part 93, subpart A. Under this rule, metropolitan planning organizations (MPOs) in nonattainment and maintenance areas coordinate with state and local air

quality and transportation agencies, EPA, FHWA, and FTA to demonstrate that an area's regional transportation plans (RTP) and transportation improvement programs (TIP) conform to the applicable SIP. This demonstration is typically done by showing that estimated emissions from existing and planned highway and transit systems are less than or equal to the motor vehicle emissions budgets (MVEBs or "budgets") contained in the SIP. An attainment, maintenance, or RFP SIP establishes MVEBs for the attainment year, each required RFP year or last year of the maintenance plan, as appropriate. MVEBs are generally established for specific years and specific pollutants or precursors.

Ozone attainment and RFP plans establish MVEBs for NO_x and VOC. See 40 CFR 93.102(b)(2)(i).

Before an MPO may use MVEBs in a submitted SIP, EPA must first either determine that the MVEBs are adequate or approve the MVEBs. In order for us to find the MVEBs adequate and approvable, the submittal must meet the conformity adequacy requirements of 40 CFR 93.118(e)(4) and (5) and be approvable under all pertinent SIP requirements. To meet these requirements, the MVEBs must be consistent with the approvable attainment and RFP demonstrations and reflect all of the motor vehicle control measures contained in the attainment and RFP demonstrations. See 40 CFR 93.118(e)(4)(iii), (iv) and (v). For more information on the transportation conformity requirements and applicable policies on MVEBs, please visit our transportation conformity Web site at:

<http://www.epa.gov/otaq/stateresources/transconf/index.htm>.

EPA's process for determining adequacy of a MVEB consists of three basic steps: (1) providing public notification of a SIP submission; (2) providing the public the opportunity to

comment on the MVEB during a public comment period; and, (3) making a finding of adequacy or inadequacy. See 40 CFR 93.118.

2. Motor Vehicle Emissions Budgets in the 2009 Plan

On July 16, 2009, we found the budgets in the 2009 Plan to be adequate for the 2011, 2014, and 2017 milestone years and inadequate for the 2018 attainment year for transportation conformity purposes.⁵⁰ We determined that the attainment year budgets were inadequate because they lacked specificity and were not fully enforceable and, therefore, did not meet the criteria for adequacy in 40 CFR § 93.118(e)(4).⁵¹ We published a notice of our findings at 74 FR 37210 (July 28, 2009).

3. Revised Vehicle Emissions Budgets in 2013 Plan Update

The 2013 Plan Update includes revised VOC and NO_x MVEBs for 2014, 2017, and 2018. See table 11-1 in the 2013 Plan Update. The MVEBs in the 2013 Plan Update replaced the original MVEBs in the 2009 Plan and account for changes in emission reductions associated with the revised 2007 State Strategy, an updated version of EMFAC (i.e., EMFAC2011), and the latest planning assumptions from the Sacramento Area Council of Governments (SACOG).

The MVEBs contained in the 2013 Plan Update are shown in table 15. The MVEBs are the projected on-road mobile source VOC and NO_x emissions for the SMA for 2014, 2017, and 2018. They include the projected on-road mobile source emissions and safety margins and are rounded up to the next whole number tpd. The conformity rule allows for a safety margin to be included in the budgets. The overall emissions in the SMA with the addition of a small safety margin added to the on-road emissions are consistent with RFP and attainment of the 1997 8-

⁵⁰ See letter from Deborah Jordan, Director, Air Division, EPA Region 9, to James N. Goldstene, Executive Officer, CARB, July 16, 2009, with enclosure.

⁵¹ See letter, Deborah Jordan, Air Division Director, EPA Region 9, to James M. Goldstene, Executive Officer, CARB, "RE: Adequacy Status of Sacramento 8-Hour Reasonable Further Progress and Attainment Plan Motor Vehicle Emissions Budgets," dated July 16, 2009.

hour ozone standard. See 40 CFR 93.124(a). The derivation of the MVEBs is discussed in section 11 of the 2013 Plan Update. The MVEBs incorporate on-road motor vehicle emission inventory factors of EMFAC2011, updated vehicle activity data from SACOG, and recent amendments to the Metropolitan Transportation Improvement Plan (2013/16 MTIP).⁵²

Table 15: Motor Vehicle Emissions Budgets in the Sacramento Ozone Plan (tpd, average summer weekday)						
	NO_x			VOC		
	2014	2017	2018	2014	2017	2018
On-Road Inventory ^a	46	37	34	21	17	16
Safety Margin	3	2	3	2	1	1
MVEBs ^b	49	39	37	23	18	17

^a Includes adjustments for measures not reflected in EMFAC2011.

^b Rounded up to nearest ton.

Source: Table 11-1 on page 11-4 of the 2013 Plan Update.

The availability of the SIP submission with MVEBs was announced for public comment on EPA's Adequacy Web site on May 20, 2014, at: <http://www.epa.gov/otaq/stateresources/transconf/currrips.htm>, which provided a 30-day public comment period that ended on June 19, 2014. EPA received no comments from the public. On July 25, 2014, EPA determined the 2014, 2017, and 2018 MVEBs were adequate.⁵³ On August 8, 2014, the notice of adequacy was published in the Federal Register. See 79 FR 46436. The new MVEBs became effective on August 25, 2014. After the effective date of the adequacy finding, the new MVEBs must be used in future transportation conformity determinations in the SMA area. EPA is not required under its transportation conformity rule to find budgets adequate prior to proposing approval of them, but in this instance, we have completed the adequacy review of these budgets prior to our final action on the 2013 Plan Update.

⁵² Final 2013/16 MTIP, Amendment #1 to the Metropolitan Transportation Plan/Sustainable Communities Strategy 2035, and Air Quality Conformity Analysis, August 16, 2012. FHWA approval December 14, 2012. http://www.sandag.org/uploads/2050RTP/F2050rtp_all.pdf

⁵³ See July 25, 2014 letter from Deborah Jordan, Director, Air Division, USEPA Region 9, to Richard W. Corey, Executive Officer, CARB. On August 8, a notice of adequacy was published in the Federal Register notifying the public that the Agency had found that the MVEBs for ozone for the years 2014, 2017, and 2018 adequate for transportation conformity purposes. See 79 FR 46436.

In today's notice, EPA is proposing to approve the 2017 and 2018 MVEBs in the 2013 Plan Update for transportation conformity purposes. EPA has determined through its thorough review of the submitted 2013 Plan Update that the 2017 and 2018 MVEBs are consistent with emission control measures in the SIP, RFP, and attainment in the SMA for the 1997 8-hour ozone NAAQS. EPA previously found the 2017 and 2018 MVEBs adequate and is now proposing to approve those budgets. The 2017 and 2018 MVEBs are used in SACOG's conformity determination for the 2015/2018 Metropolitan Transportation Improvement Program⁵⁴ and will be used in future conformity determinations. The 2014 MVEBs are not used in SACOG's conformity determination and will not be used in future conformity determinations because SACOG is not required to address any year prior to 2017. Therefore, EPA has determined that not approving the 2014 MVEBs would have no practical impact on the transportation planning agencies in the SMA.

The details of EPA's evaluation of the MVEBs for compliance with the budget adequacy criteria of 40 CFR 93.118(e) were provided in a separate adequacy letter⁵⁵ included in the docket of this rulemaking.

4. Proposed Action on the Budgets

As part of its review of the budgets' approvability, EPA has evaluated the revised budgets using our adequacy criteria in 40 CFR 93.318(e)(4) and (5). We found that the 2017 and 2018 budgets meet each adequacy criterion. We have completed our detailed review of the 2013 Plan Update, and are proposing to approve the SIP's attainment and RFP demonstrations. We have

⁵⁴ On September 18, 2014, the SACOG Board of Directors approved the 2015/18 Metropolitan Transportation Improvement Program, Amendment #4 to the Metropolitan Transportation Plan/Sustainable Communities Strategy 2035, and Air Quality Conformity Analysis.

⁵⁵ See footnote #53.

also reviewed the proposed budgets submitted with the 2013 Plan Update and have found that the 2017 and 2018 budgets are consistent with the attainment and RFP demonstrations, were based on control measures that have already been adopted and implemented, and meet all other applicable statutory and regulatory requirements including the adequacy criteria in 40 CFR 93.118(e)(4) and (5). Therefore, we are proposing to approve the 2017 and 2018 budgets as shown in table 15.

As described above, the 2017 and 2018 budgets were determined to be adequate on July 25, 2014 and became effective on August 25, 2014. The new budgets replace the budgets previously found adequate in 2009, and SACOG and the U.S. Department of Transportation are required to use the new budgets in transportation conformity determinations as of August 25, 2014. If EPA later finalizes the approval of the 2017 and 2018 budgets, it will not affect SACOG and the U.S. Department of Transportation because they already are required to use the new budgets as of August 25, 2014. For conformity determinations, the plan emissions should be used at the same level of accuracy as in the revised updated budgets from the 2013 Plan Update.

CARB requested that EPA limit the duration of its approval of the budgets submitted on December 31, 2013 as part of the 2013 Plan Update to last only until the effective date of EPA's adequacy finding for any subsequently submitted budgets. See letter, Richard W. Corey, Executive Officer, California Air Resources Board, December 31, 2013.

The transportation conformity rule allows EPA to limit the approval of budgets. See 40 CFR 93.118(e)(1). However, we can only consider a state's request to limit an approval of its MVEB if the request includes the following elements:

- An acknowledgement and explanation as to why the budgets under consideration have become outdated or deficient;

- A commitment to update the budgets as part of a comprehensive SIP update; and
- A request that EPA limit the duration of its approval to the time when new budgets have been found to be adequate for transportation conformity purposes.

See 67 FR 69141 (November 15, 2002) (limiting our prior approval of MVEB in certain California SIPs).

Because CARB's request does not include all of these elements, we cannot address it at this time. Once CARB has adequately addressed them, we intend to propose to limit the duration of our approval of the MVEBs in the 2013 Plan Update and provide the public an opportunity to comment. The duration of the approval of the budgets, however, is not limited until we complete such a rulemaking.

H. Vehicle Miles Travelled Emissions Offset Demonstration

CAA section 182(d)(1)(A) requires a state with areas classified as "Severe" or "Extreme" to "submit a revision that identifies and adopts specific enforceable transportation control strategies and transportation control measures to offset any growth in emissions from growth in vehicle miles traveled or numbers of vehicle trips in such area." Herein, we use "VMT" to refer to vehicle miles traveled and refer to the related SIP requirement as the "VMT emissions offset requirement." In addition, we refer to the SIP revision intended to demonstrate compliance with the VMT emissions offset requirement as the "VMT emissions offset demonstration." Moreover, the SMA is subject to the VMT emissions offset requirement for the 1997 8-hour ozone standard by virtue of its classification as "Severe" for the 1997 ozone standard. See 75 FR 24409 (May 5, 2010); and 40 CFR 51.902(a).

CAA section 182(d)(1)(A) also includes two additional elements requiring that the SIP include: (1) transportation control strategies and transportation control measures as necessary to

provide (along with other measures) the reductions needed to meet the applicable RFP requirement, and (2) include strategies and measures to the extent needed to demonstrate attainment.

1. Evaluation of Revised Sacramento VMT Emissions Offset Demonstrations

a. Section 182(d)(1)(A) and EPA's August 2012 VMT Emissions Offset Demonstration Guidance

As noted previously, the first element of CAA section 182(d)(1)(A) requires that areas classified as “Severe” or “Extreme” submit a SIP revision that identifies and adopts transportation control strategies and transportation control measures sufficient to offset any growth in emissions from growth in VMT or the number of vehicle trips. In response to the Court’s decision in *Association of Irrigated Residents v. EPA*, EPA issued a memorandum titled *Guidance on Implementing Clean Air Act Section 182(d)(1)(A): Transportation Control Measures and Transportation Control Strategies to Offset Growth in Emissions Due to Growth in Vehicle Miles Travelled* (herein referred to as the “August 2012 guidance”).⁵⁶

The August 2012 Guidance discusses the meaning of the terms, “transportation control strategies” (TCSs) and “transportation control measures” (TCMs), and recommends that both TCSs and TCMs be included in the calculations made for the purpose of determining the degree to which any hypothetical growth in emissions due to growth in VMT should be offset. Generally, TCSs is a broad term that encompasses many types of controls including, for example, motor vehicle emission limitations, inspection and maintenance (I/M) programs, alternative fuel programs, other technology-based measures, and TCMs, that would fit within the regulatory definition of “control strategy.” See, e.g., 40 CFR 51.100(n). TCMs are defined at 40

⁵⁶ Memorandum from Karl Simon, Director, Transportation and Climate Division, Office of Transportation and Air Quality, to Carl Edland, Director, Multimedia Planning and Permitting Division, EPA Region 6, and Deborah Jordan, Director, Air Division, EPA Region 9, August 30, 2012.

CFR 51.100(r) as meaning “any measure that is directed toward reducing emissions of air pollutants from transportation sources. Such measures include, but are not limited to those listed in section 108(f) of the Clean Air Act[,]” and generally refer to programs intended to reduce the VMT, the number of vehicle trips, or traffic congestion, such as programs for improved public transit, designation of certain lanes for passenger buses and high-occupancy vehicles (HOVs), trip reduction ordinances, and the like.

The August 2012 guidance explains how states may demonstrate that the VMT emissions offset requirement is satisfied in conformance with the Court’s ruling. States are recommended to estimate emissions for the nonattainment area’s base year and the attainment year. One emission inventory is developed for the base year, and three different emissions inventory scenarios are developed for the attainment year. For the attainment year, the state would present three emissions estimates, two of which would represent hypothetical emissions scenarios that would provide the basis to identify the “growth in emissions” due solely to the growth in VMT, and one that would represent projected actual motor vehicle emissions after fully accounting for projected VMT growth and offsetting emissions reductions obtained by all creditable TCSs and TCMs. See the August 2012 guidance for specific details on how states might conduct the calculations.

The base year on-road VOC emissions should be based on VMT in that year and it should reflect all enforceable TCSs and TCMs in place in the base year. This would include vehicle emissions standards, state and local control programs such as I/M programs or fuel rules, and any additional implemented TCSs and TCMs that were already required by or credited in the SIP as of that base year.

The first of the emissions calculations for the attainment year would be based on the projected VMT and trips for that year, and assume that no new TCSs or TCMs beyond those already credited in the base year inventory have been put in place since the base year. This calculation demonstrates how emissions would hypothetically change if no new TCSs or TCMs were implemented, and VMT and trips were allowed to grow at the projected rate from the base year. This estimate would show the potential for an increase in emissions due solely to growth in VMT and trips. This represents a “no action” taken scenario. Emissions in the attainment year in this scenario may be lower than those in the base year due to the fleet that was on the road in the base year gradually being replaced through fleet turnover; however, provided VMT and/or numbers of vehicle trips will in fact increase by the attainment year, they would still likely be higher than they would have been assuming VMT had held constant.

The second of the attainment year’s emissions calculations would also assume that no new TCSs or TCMs beyond those already credited have been put in place since the base year, but would also assume that there was no growth in VMT and trips between the base year and attainment year. This estimate reflects the hypothetical emissions level that would have occurred if no further TCMs or TCSs had been put in place and if VMT and trip levels had held constant since the base year. Like the “no action” attainment year estimate described above, emissions in the attainment year may be lower than those in the base year due to the fleet that was on the road in the base year gradually being replaced by cleaner vehicles through fleet turnover, but in this case they would not be influenced by any growth in VMT or trips. This emissions estimate would reflect a ceiling on the attainment emissions that should be allowed to occur under the statute as interpreted by the Court because it shows what would happen under a scenario in which no offsetting TCSs or TCMs have yet been put in place and VMT and trips are held

constant during the period from the area's base year to its attainment year. This represents a "VMT offset ceiling" scenario. These two hypothetical status quo estimates are necessary steps in identifying the target level of emissions from which states would determine whether further TCMs or TCSs, beyond those that have been adopted and implemented in reality, would need to be adopted and implemented in order to fully offset any increase in emissions due solely to VMT and trips identified in the "no action" scenario.

Finally, the state would present the emissions that are actually expected to occur in the area's attainment year after taking into account reductions from all enforceable TCSs and TCMs that in reality were put in place after the baseline year. This estimate would be based on the VMT and trip levels expected to occur in the attainment year (i.e., the VMT and trip levels from the first estimate) and all of the TCSs and TCMs expected to be in place and for which the SIP will take credit in the area's attainment year, including any TCMs and TCSs put in place since the base year. This represents the "projected actual" attainment year scenario. If this emissions estimate is less than or equal to the emissions ceiling that was established in the second of the attainment year calculations, the TCSs or TCMs for the attainment year would be sufficient to fully offset the identified hypothetical growth in emissions.

If, instead, the estimated projected actual attainment year emissions are still greater than the ceiling which was established in the second of the attainment year emissions calculations, even after accounting for post-baseline year TCSs and TCMs, the state would need to adopt and implement additional TCSs or TCMs to further offset the growth in emissions and bring the actual emissions down to at least the "had VMT and trips held constant" ceiling estimated in the second of the attainment year calculations, in order to meet the VMT offset requirement of section 182(d)(1)(A) as interpreted by the Court.

b. Sacramento VMT Emissions Offset Demonstrations

For the Sacramento VMT emissions offset demonstrations, the State used EMFAC2011, the latest EPA-approved motor vehicle emissions model for California. The EMFAC2011 model estimates the on-road emissions from two combustion processes (i.e., running exhaust and start exhaust) and four evaporative processes (i.e., hot soak, running losses, diurnal losses, and resting losses). The EMFAC2011 model combines trip-based VMT data from the regional transportation planning agencies (i.e., SACOG), starts data based on household travel surveys, and vehicle population data from the California Department of Motor Vehicles. These sets of data are combined with corresponding emission rates to calculate emissions.

Emissions from running exhaust, start exhaust, hot soak, and running losses are a function of how much a vehicle is driven. As such, emissions from these processes are directly related to VMT and vehicle trips, and the State included emissions from them in the calculations that provide the basis for the revised Sacramento VMT emissions offset demonstration. The State did not include emissions from resting loss and diurnal loss processes in the analysis because such emissions are related to vehicle population, not to VMT or vehicle trips, and thus are not part of “any growth in emissions from growth in *vehicle miles traveled or numbers of vehicle trips* in such area” (emphasis added) under CAA section 182(d)(1)(A).

The Sacramento VMT emissions offset demonstration addresses the 1997 8-hour ozone standard and includes a 2002 “base year” scenario for the purpose of the VMT emissions offset demonstration for the 1997 8-hour ozone standard. The “base year” for VMT emissions offset demonstration purposes should generally be the same “base year” used for nonattainment planning purposes. In today’s action, EPA is proposing to approve the 2002 base year inventory for the SMA for the purposes of the 1997 8-hour ozone standard, and thus, the State’s selection

of 2002 as the base year for the revised Sacramento VMT emissions offset demonstration for the 1997 8-hour ozone standard is appropriate.

The demonstration also includes the previously described three different attainment year scenarios (i.e., no action, VMT offset ceiling, and projected actual) for 2018. The State's selection of 2018 is appropriate given that the Sacramento Ozone Plan demonstrates attainment by the applicable attainment date of June 15, 2019 based on the 2018 controlled emissions inventory.⁵⁷ See 76 FR 57872, at 57885 (September 16, 2011) and 77 FR 12674, at 12693 (March 1, 2012).

Table 16 summarizes the relevant distinguishing parameters for each of the emissions scenarios and show the State's corresponding VOC emissions estimates. Table 16 provides the parameters and emissions estimates for the revised VMT emissions offset demonstration for the 1997 8-hour ozone standard.

Table 16. VMT Emissions Offset Inventory Scenarios and Results for 1997 8-Hour Ozone Standard.						
Scenario	VMT		Starts		Controls	VOC Emissions
	Year	1000/day	Year	1000/day	Year	tpd
Base Year	2002	52,595	2002	7,935	2002	45
No Action	2018	64,709	2018	10,640	2002	28
VMT Offset Ceiling	2002	52,595	2002	7,935	2002	19
Projected Actual	2018	64,709	2018	10,640	2018	14

Source: CARB's Technical Supplement, July 24, 2014.

⁵⁷ In this context, "attainment year" refers to the ozone season immediately preceding a nonattainment area's attainment date. In the case of the SMA, the applicable attainment date is June 15, 2019, and the ozone season immediately preceding that date will occur in year 2018.

For the “base year” scenario, the State ran the EMFAC2011 model for the 2002 base year using VMT and starts data corresponding to those years. As shown in table 16, the State estimates SMA VOC emissions at 45 tpd in 2002.

For the “no action” scenario, the State first identified the on-road motor vehicle control programs (i.e., TCSs or TCMs) put in place since the base year and incorporated into EMFAC2011 and then ran EMFAC2011 with the VMT and starts data corresponding to the applicable attainment year (i.e., 2018 for the 1997 8-hour ozone standard) without the emissions reductions from the on-road motor vehicle control programs put in place after the base year. Thus, the “no action” scenario reflects the hypothetical VOC emissions that would occur in the attainment year in the SMA if the State had not put in place any additional TCSs or TCMs after 2002. As shown in table 16, the State estimates “no action” SMA VOC emissions at 28 tpd in 2018.

For the “VMT offset ceiling” scenario, the State ran the EMFAC2011 model for the attainment year but with VMT and starts data corresponding to base year values. Like the “no action” scenario, the EMFAC2011 model was adjusted to reflect the VOC emissions levels in the attainment year without the benefits of the post-base-year on-road motor vehicle control programs. Thus, the “VMT offset ceiling” scenario reflect hypothetical VOC emissions in the SMA if the State had not put in place any TCSs or TCMs after the base year and if there had been no growth in VMT or vehicle trips between the base year and the attainment year.

The hypothetical growth in emissions due to growth in VMT and trips can be determined from the difference between the VOC emissions estimates under the “no action” scenario and the corresponding estimate under the “VMT offset ceiling” scenario. Based on the values in table 16, the hypothetical growth in emissions due to growth in VMT and trips in the SMA would have

been 9 tpd (i.e., 28 tpd minus 19 tpd) for the purposes of the revised VMT emissions offset demonstration for the 8-hour ozone standard. This hypothetical difference establishes the level of VMT growth-caused emissions that need to be offset by the combination of post-baseline year TCMs and TCSs and any necessary additional TCMs and TCSs.

For the “projected actual” scenario calculation, the State ran the EMFAC2011 model for the attainment year with VMT and starts data at attainment year value and with the full benefits of the relevant post-baseline year motor vehicle control programs. For this scenario, the State included the emissions benefits from TCSs and TCMs put in place since the base year.

The most significant State on-road and fuels measures providing reductions during the 2002 to 2018 time frame and relied upon for the VMT emissions offset demonstration include Low Emission Vehicles II and Zero Emissions Vehicle standards, California Reformulated Gasoline Phase 3, and Cleaner In-Use Heavy-Duty Trucks. Some of these measures were adopted prior to 2002, but all or part of their implementation occurred after 2002. The TSD for today’s action includes a list of TCSs and TCMs adopted by the State since 2002.⁵⁸ State measures adopted since 2007, as part of the revised 2007 State Strategy, and their reductions are also described in the IV.C and IV.D of this notice. Additional information regarding implementation and expected reductions from CARB’s adopted measures is also available on CARB’s rulemaking activity web site.⁵⁹

As shown in table 16, the results from these calculations establish projected actual attainment-year VOC emissions of 14 tpd for the 1997 8-hour standard demonstration. The State then compared these values against the corresponding VMT offset ceiling value to determine

⁵⁸ The docket for today’s action includes a list of the post-1990 transportation control strategies. Per section 209 of the CAA, the EPA has previously waived (for control of emissions from new motor vehicles of new motor vehicle engines prior to March 30, 1966) or authorized (for control emissions of nonroad engines or vehicles) all such TCSs and TCMs relied upon for the VMT emissions offset demonstration.

⁵⁹ See <http://www.arb.ca.gov/regact/regact.htm>.

whether additional TCMs or TCSs would need to be adopted and implemented in order to offset any increase in emissions due solely to VMT and trips. Because the “projected actual” emissions are less than the corresponding “VMT Offset Ceiling” emissions, the State concluded that the demonstration shows compliance with the VMT emissions offset requirement and that there are sufficient adopted TCSs and TCMs to offset the growth in emissions from the growth in VMT and vehicle trips in the SMA for 1997 8-hour standard. In fact, taking into account of the creditable post-baseline year TCMs and TCSs, the State showed that they offset the hypothetical differences by 14 tpd for the 1997 8-hour standard, rather than merely the required 9 tpd.⁶⁰

Based on our review of the State’s submittal, including the technical supplement, we find the State’s analysis to be acceptable and agree that the State has adopted sufficient TCSs and TCMs to offset the growth in emissions from growth in VMT and vehicle trips in the SMA for the purposes of the 1997 8-hour ozone standard. As such, we find that the revised SMA VMT emissions offset demonstration, complies with the VMT emissions offset requirement in CAA section 182(d)(1)(A), and therefore, we propose approval of the revised SMA VMT emissions offset demonstration for the 1997 8-hour ozone standards as a revision to the California SIP.

Regarding the two additional elements in 182(d)(1)(A), as discussed above in section IV.D, we are proposing to find that the Sacramento Ozone Plan provides for RFP consistent with all applicable CAA and EPA regulatory requirements. Therefore, we also propose to find that the SIP meets requirement in CAA section 182(d)(1)(A) to include TCSs and TCMs as necessary to provide (along with other measures) the reductions needed to meet the applicable RFP requirement.

⁶⁰ The offsetting VOC emissions reductions from the TCSs and TCMs put in place after the respective base year can be determined by subtracting the “projected actual” emissions estimates from the “no action” emissions estimates in table 16. For the purposes of the 8-hour ozone demonstration, the offsetting emissions reductions, 14 tpd (28 tpd minus 14 tpd), exceed the growth in emissions from growth in VMT and vehicle trips (9 tpd).

Finally, based on the discussion in sections IV.B and IV.C above, we are proposing to find that the Sacramento Ozone Plan provides for expeditious attainment of the 1997 8-hour ozone standard. Therefore, we propose to find that the SIP meets the requirement in CAA section 182(d)(1)(A) to include strategies and measures to the extent needed to demonstrate attainment.

Under CAA section 110(k)(3), and for the reasons set forth above, EPA is proposing to approve CARB's 2013 Plan Update submittal, dated December 31, 2013, of the Sacramento VMT emissions offset demonstration for the 1997 8-hour ozone standards, as supplemented by CARB on June 19, 2014, as a revision to the California SIP. We are proposing to approve this SIP revision because we believe that it demonstrates that California has put in place specific enforceable transportation control strategies and transportation control measures to offset the growth in emissions from the growth in VMT and vehicle trips in the SMA for the 1997 8-hour ozone standard, and thereby meets the applicable requirements in section 182(d)(1)(A) of the Clean Air Act.

V. EPA's Proposed Actions

A. EPA's Proposed Approvals

For the reasons discussed above, EPA is proposing to approve California's attainment SIP for the Sacramento Metro Area for the 1997 8-hour Ozone NAAQS. This SIP is comprised of the Sacramento Regional Nonattainment Area 8-Hour Ozone Reasonable Further Progress Plan 2002-2008 (February 2006), Sacramento Regional 8-Hour Ozone Attainment Plan and Reasonable Further Progress Plan (March 26, 2009), CARB's 2007 State Strategy and Revised 2007 State Strategy (specifically the portions applicable to the SMA), and the Sacramento Regional 8-Hour Ozone Attainment Plan and Reasonable Further Progress Plan (September 26, 2013).

EPA is proposing to approve under CAA section 110(k)(3) the following elements of the Sacramento Ozone Plan:

1. The revised 2002 base year emissions inventory as meeting the requirements of CAA section 182(a)(1) and 40 CFR 51.915;
2. The reasonably available control measure demonstration as meeting the requirements of CAA section 172(c)(1) and 40 CFR 51.912(d);
3. The rate of progress and reasonable further progress demonstrations as meeting the requirements of CAA sections 172(c)(2) and 182(c)(2)(B) and 40 CFR 51.910 and 51.905;
4. The attainment demonstration as meeting the requirements of CAA section 182(c)(2)(A) and 40 CFR 51.908;
5. The contingency measure provisions for failure to make RFP and to attain as meeting the requirements of CAA sections 172(c)(9) and 182(c)(9);
6. The demonstration that the SIP provides for transportation control strategies and measures sufficient to offset any growth in emissions from growth in VMT or the number of vehicle trips, and to provide for RFP and attainment, as meeting the requirements of CAA section 182(d)(1)(A);
7. The revised motor vehicle emissions budgets for 2017 and for the attainment year of 2018, because they are derived from approvable RFP and attainment demonstrations and meet the requirements of CAA sections 176(c) and 40 CFR part 93, subpart A; and
8. The Districts' commitments to adopt and implement certain defined measures, as listed in table 7-2 on pages 7-5 and 7-6 of the 2013 Plan Update.

B. Request for Public Comments

EPA is soliciting public comments on the issues discussed in this document or on other relevant matters. We will accept comments from the public on this proposal for the next 30 days. We will consider these comments before taking final action.

VI. Statutory and Executive Order Reviews

The Administrator is required to approve a SIP submission that complies with the provisions of the Act and applicable federal regulations. 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, EPA's role is to approve state choices, provided that they meet the criteria of the Clean Air Act. Accordingly, this action merely proposes to approve a state plan revision as meeting federal requirements and does not impose additional requirements beyond those imposed by state law. For these reasons, this proposed action:

- Is not a "significant regulatory action" subject to review by the Office of Management and Budget under Executive Order 12866 (58 FR 51735, October 4, 1993);
- Does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*);
- Is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*);
- Does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Pub. L. 104-4);
- Does not have federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- Is not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);

- Is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);
- Is not subject to requirements of Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the CAA; and
- Does not provide EPA with the discretionary authority to address disproportionate human health or environmental effects with practical, appropriate, and legally permissible methods under Executive Order 12898 (59 FR 7629, February 16, 1994).

In addition, this proposed rule does not have tribal implications as specified by Executive Order 13175 (65 FR 67249, November 9, 2000), because the SIP is not approved to apply in Indian country located in the State, and EPA notes that it will not impose substantial direct costs on tribal governments or preempt tribal law.

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Incorporation by reference, Intergovernmental regulations, Nitrogen dioxide, Ozone, Reporting and recordkeeping requirements, Volatile organic compounds.

AUTHORITY: 42 U.S.C. 7401 *et seq.*

Dated: September 24, 2014.

Jared Blumenfeld,
Regional Administrator,
EPA Region IX

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